Management Services in Government

August 1978 Volume 33 Number 3

Management Services in Government

Incorporating the O & M Bulletin

August 1978 Volume 33 Number 3

Published by the Civil Service Department, Management Services, in collaboration with Departmental Management Services Officers. Correspondence and contributions should be addressed to The Editor, Management Services in Government, Civil Service Department, Whitehall, London SW1A 2AZ

ISSN: 0307-8558

New subscribers outside the Civil Service may place orders for a year's supply of the journal with the Editor; orders should be accompanied by a crossed cheque or postal order for £2·88 made payable to Her Majesty's Stationery Office. (Renewal of annual subscriptions is arranged by H.M.S.O.) Subscriptions are accepted on the express understanding that the material published is for the information of the recipient and use within his organization, but is not for publication or quotation without permission.

Offprints of articles and additional copies of supplements are available from the Editor. Orders from persons and organizations outside the Civil Service must be accompanied by a cheque or postal order, made payable to the Civil Service Department. The charge for copies is: offprints 4p per page; and supplements 16p per copy. Remittances should include an appropriate amount to cover postage. Subscribers may also purchase additional copies of the publication itself at a cost of 72p per copy, including postage.

It would be helpful if recipients could check that their copy is correctly addressed. If it is not, please send details of the correct address (including the postal code, where appropriate) to the Editor, quoting the reference number shown on the present address plate.

Contents

Page

105 The Developing Structure of United Kingdom Government
Lord Croham, GCB

114 Framing Targets for Accountability
B. M. Currie

127 Openness in Appraisal in the Civil Service

135 Teleconferencing: The Meeting of the Future—Now
R. Pye and J. Springate

140 Energy Conservation in the Government Estate
H. Dixon

150 Planning for Centralized Dictation
J. E. P. Sampson

158 Management Bookshelf—Typing and Secretarial Services
Mrs. B. M. Howard

161 New CSD Publications

163 Computer Installations for Government Departments

The Developing Structure of United Kingdom Government

LORD CROHAM, GCB

Lord Croham is the former Sir Douglas Allen, Head of the Home Civil Service and Permanent Secretary, Civil Service Department from 1974 until his retirement in December 1977. He recently delivered one of the London Business School's three annual Stockton Lectures. The subject of the lecture is, perhaps, a little outside the journal's usual subject-area, but we think it is of interest to civil servants generally and is therefore reproduced below by kind permission of the London Business School.

—*Editor*.

Introduction

The role of Government in all Western societies has grown enormously in the last 30 years, not least in our own country. This is sometimes measured by the share which public expenditure takes of Gross Domestic Product—on one measure this has grown from 40·5 per cent in 1947 to 52 per cent in 1976. It would be tempting to measure it by the volume of government regulations to which the citizen is expected to conform —but no comprehensive measure of these exists at present. Whether or not the share of GDP taken by public expenditure falls from now on or continues to rise, I would not myself expect to see any decline in the volume of laws, directions, regulations, bye-laws, etc. I am, however, going to argue that in this country the role and power of our central government, by which I mean the Cabinet in Westminster and its supporting Departments of State, reached its peak at the end of the 1960s, and has already declined and will continue to decline. I see a number of reasons for this. Many of these will be universally welcomed. Others will be welcomed by some and bitterly opposed by others. I propose to list and discuss the main factors bringing about a changed role for central government and suggest that some of the consequences of these factors taken together could be more far-reaching than most people yet realize.

The main factors

The main factors affecting the role of central government are:

(1) Our membership of the European Economic Community.

(2) Moves to devolution.
(3) A tendency to transfer functions previously entirely controlled by Ministers to bodies which acquire a considerable degree of independence of Ministerial control (e.g. the Manpower Services Commission).
(4) A tendency for Parliament (i.e. the backbencher) to get back some of the power previously lost.
(5) The increase in the power of interest groups—especially the Trades Union Congress and the Confederation of British Industries.
(6) The increased role of staff consultation and collective bargaining.
(7) Moves towards greater openness in government.
(8) Changes in attitudes of the public to government and authority.

European Economic Community

It is, of course, an inevitable consequence of the legislation which gave effect to our membership of the EEC that a substantial part of the new rules and regulations which control our lives emanate from Brussels. This does not mean that the United Kingdom Government and the United Kingdom Parliament have no part to play in this law-making process (indeed, Parliament may be about to obtain more control than at present), but it does mean that these rules and regulations have to be designed to meet the needs of the Community as a whole and not what the United Kingdom Government decides best meets the needs of the United Kingdom. An interesting question is what effect the creation of a directly elected European Parliament will have on our relationships with Europe. Elected status tends to increase authority and one would expect a directly elected European Parliament to seek greater control of EEC policies. The respective roles of Commission, Ministerial Councils and Parliament may begin to change as a result. It is possible that in time the parties in the European Parliament will divide not between left and right as in national Parliaments but between those parties seeking to promote greater European unity by increasing the powers of the Commission and the centre on the one hand and those seeking to protect national rights on the other. I propose to suggest later in this lecture that there may be a limit to the number of elected levels of government which can co-exist successfully.

Devolution

Although by far the greater part of parliamentary time this session is being devoted to the legislation which will establish the Scottish and Welsh National Assemblies, far too few people in the United Kingdom (and in England in particular) yet realize the full significance of this devolution. It means the transfer of real power to both Scotland and Wales to decide if they wish to run their affairs in many fields of policy in a quite different way from the rest of the United Kingdom. Scotland will have the more far-reaching powers and will have extensive devolved powers in respect of education, health service administration, housing

and public works. In all this area the Westminster Parliament and Cabinet will give up any powers to secure uniformity of treatment over the United Kingdom or to influence the distributions of resources between these functions. Full responsibility for the devolved functions in Scotland will lie with the Scottish Assembly, which will have its own Ministers and will control its own bureaucracy (whatever relationship this retains with the United Kingdom Civil Service). The main areas where no powers are to be devolved are defence and taxation. The absence of a devolved taxing power, of course, leads many to suggest that the financial relations between the Assembly and Whitehall could prove to be a recurring source of friction and of pressure for further change.

Wales will have less extensive powers, the proposed devolution there being administrative and not legislative. Moreover, the proposed referendum might not support an Assembly. But whether an Assembly is created or not, I would expect to see a continuing transfer of functions from departments centred in Whitehall to departments in Cardiff.

It is highly unlikely that this year's legislation will be the last stage in this process of transferring functions away from Westminster/Whitehall. There are two issues likely to impel further change. The first is the finance/taxation issue which I have already mentioned. The second is the problem of legislation relating to functions in England which for Scotland have ceased to be the responsibility of Westminster; how far should this be determined by Scottish votes, already more numerous than would be justified on a population basis? Most suggestions for dealing with these issues create at least as many problems as they solve. There is as yet no demand in England for changes which would parallel the proposed change for Scotland, but were we to begin moving in this direction (i.e. a substantially enhanced role for Regional Councils) the movement of functions away from Westminster/Whitehall would be accelerated. Once the Assemblies begin functioning there is likely to be a division in them between 'nationalists' wanting to continue towards total independence and representatives of United Kingdom parties who want to keep United Kingdom unity and pursue traditional party politics.

Hiving off

By contrast with these two processes, the process of transferring functions from government departments to fringe bodies less under Ministerial control may have reached its limit for a time. There is nothing very new about giving functions to boards or fringe bodies for which Ministers will not accept as full a responsibility to Parliament as they accept for Departments of State, but such hiving-off has usually been done when the functions have been accepted by government for the first time. The first major development of this kind in the post-war period was the nationalized industries. Here the original constitutional objective was to give the managing boards of these industries a reason-

able degree of independence from government interference and parliamentary questioning on day-to-day business. At the beginning of this decade the idea of hiving-off existing government functions to semi-independent bodies gained a good deal of support. The idea had several variants and several motives. One of the latter was essentially the same purpose as that for the nationalized industries—the belief that it would enable more effective management and less bureaucratic methods of control. Another motive was to associate other interests with the general control so as to maximize the general support in the community for the actions being taken. The latest development has been for one of these hived-off bodies—the Health and Safety Commission—to demand the power to sue the Government itself in the latter's capacity as an employer.

Parliament

In seeing a tendency for power to move back to Parliament from the central government, I am claiming that there is a trend which is more than a short-term consequence of our having Governments without workable majorities in Parliament, important though that factor is at the present time. I believe that the frequent lurches in Government policies which we have experienced in this country and the failure of Governments to communicate adequately with the public in crisis situations have given Parliament a chance to fight back and regain power from central government. Parliamentary Committees are demanding a monitoring role and are now more likely to get it. The advice of such committees, when there is a bi-partisan consensus, is much more likely to be listened to by Government than in the recent past. The role of these committees could create constitutional problems, especially when they seek to parallel the activities of individual departments. For instance, to the extent that their main interest is why departments have adopted certain policies, it is in my view the Ministers of a department rather than its officials whom they should seek to cross-examine. If Ministers were regularly appearing before committees, it could bring about a new relationship between Ministers and Parliament.

I have, of course, been speaking about formal parliamentary committees drawn from all parties. There has also been a marked tendency for the Government to have a closer relationship with its own parliamentary party, of which the liaison functions of a proportion of the Special Advisers who have been appointed in larger numbers since 1974 (though the total is not yet large) is only one manifestation. I believe that both these tendencies would be there even if the state of the parties in Parliament was not as balanced as at present. But they are given additional impetus by the state of the parties in the House. Should it prove to be a long time before any single party has again a substantial majority over all the other parties taken together, the power of Parliament in relation to the Executive is likely to continue to grow.

Interest groups

The power of interest groups outside Parliament has already grown enormously in the last decade. The tendency of Governments to enlist the co-operation of the TUC and CBI or to seek some form of tripartite agreement on general economic policy became so marked at one time that there was a good deal of talk about the corporate state. There is at present less emphasis on tripartite approaches than a few years ago —though the industrial strategy is an important tripartite policy—and more emphasis on the bilateral approach. The first two rounds of the incomes policy after 1975 were outstanding examples of the power of the TUC; during their currency the Government was frequently asking advice from the TUC on the interpretation of the policy. This came about in my view because what was sought was a policy which was universally applied but did not depend on statute. Whenever there is recognition that general objectives are desirable but have to be secured by agreement rather than by statute, the role of interest groups is bound to be important.

The TUC and CBI are, of course, only two of many interest groups in the economic field and there are a multiplicity of interest groups in other fields. We have up to now had very much less of lobby politics in the United Kingdom than in the United States, but the environmental lobby and the anti-motorway lobby are two which have grown in influence in recent years.

Then there is the power of large individual trade unions, especially in the public sector. This is usually deployed in the context of collective bargaining but may from time to time be exerted with the intention of limiting the freedom of manoeuvre of the central government on policy issues not directly related to pay, e.g. public procurement policy.

Staff consultation and collective bargaining

For a whole number of reasons, all employers including Government have found it necessary to increase the extent of consultation with staff before management decisions are taken. Increasingly in recent years Governments have found that they cannot carry their policies into effect unless they can persaude staff to take on additional duties, work additional overtime, etc. Sometimes a price has to be paid for this co-operation; sometimes a different plan has to be put into effect. Some public service unions have come to challenge Government policies as such. As regards industrial democracy, there are problems about its application in the sphere of government. The responsibility of the Government to voters (the elective principle) must limit the extent to which Government policy can be subject to consultation with its employees. At the same time, there is no chance that public sector employees will accept that they should not be consulted on subjects on which there will be full consultation with employees in the private sector and the nationalized industries; any extension of the role of collective bargaining there is bound to be claimed by both local and

central government employees. But many issues of general public policy—e.g. the dispersal of government work from central London—are also questions affecting conditions of work on which strong views are held.

Open government

So far only very limited moves towards open government have been taken in this country, but given the general spirit of the age I am sure that there are many more moves to come. I expect to see an increase in the open discussion of policy options before decisions are taken and a greater dissemination of relevant information to enable judgements to be made, in other words, building on the beginnings made by the publication of Green Papers and the promised release of factual material related to policy reviews. These are steps initiated by government. Some other countries have legislated for a public right of access to all records (apart from those related to a limited number of protected matters such as defence and personal matters), thus making it possible for individual members of the public to take the initiative. This has proved to be cumbersome and very expensive in resources. Whatever form it takes, greater openness can improve the quality of decision-taking by promoting public discussion before government decisions are taken and by enabling more critical review of policies once they are executed. I would also expect Parliament to press for greater openness in order to enable it to exert more control over the Executive.

There is also a general desire to amend the Official Secrets Act to reduce the element of criminality in the dissemination of protected information. This is an important subject but I do not consider it to be as significant a factor in relation to the evolution of government power as the greater release of government information.

I should perhaps add that I do not think that our doctrine of collective Cabinet responsibility could continue unless the Cabinet does speak with one voice once decisions are taken; it not being revealed whether or not individual Ministers previously held differing views. Too much openness here could mean the end of our kind of Cabinet government —some believe it would drive us towards a presidential system.

Changed attitudes to authority

My last factor is the diminished respect with which those in any sort of authority are held in this country at the present time. Old attitudes have changed very drastically in a short time, less than 20 years, and rank and status no longer command even a hearing, let alone obedience. A leading politician has much greater difficulty in securing an audience than a minor pop star. What is, perhaps, more worrying is that attitudes towards the law are changing. There has probably been too much legislation in total for people to comprehend. There has been a great deal of legislation which is not universal in its application, or which is not enforced because it is virtually unenforceable. The large amount

of legislation on motoring is a classic example; it has become almost respectable to break it if you can get away with it. All these things have produced a radically different attitude to the law from that which existed a generation ago.

Since central government relies so much on legislation and on exhortation to carry its policies into effect, these changed attitudes reduce its influence on events. Partly as cause and partly as effect, there is less satisfaction with the performance of government in its very important function of providing security and order.

Further developments

I attribute to these factors taken together the much less dominant role I see for central government in the United Kingdom in the late 1970s than in the 1960s. They are not obviously economic factors though I believe economic factors underlie them. In the 1960s many of us expected the concern over the United Kingdom's comparatively poor economic performance would lead to an increase in the role and power of central government. I believe that it has led to more government in total but with power more diffused. Over the last decade economic factors have been the reason why central governments have promised too much and tried to do too much; failure to satisfy economic expectations has been a major cause of much of the reduced confidence in old-style centralization and the search for other expedients and for new developments in government. I believe that economic factors will continue to influence the future pace and direction of constitutional change, including the total amount of government we find ourselves subject to. But I cannot myself envisage any economic developments which would reverse the trends I have been discussing in the near future.

I do not propose to discuss in this lecture whether in this country we are now subject to too much government in total. I do, however, want to suggest that we are likely to find ourselves in future with too many layers of elected government. I believe there is a limit to the number of directly elected governing levels which you can have if you want a healthy democracy. It is not just a question of too many separate elections; it is not just a question of the relative status of all the different elected representatives, though this could be important; it is rather that with too many levels the roles and responsibilities of the different elected authorities cannot be made sufficiently distinct; that the territorial loyalties which are a necessary element in the feeling of belonging cannot develop and that the different responsibilities of the separate levels of authority are neither understood nor fully accepted by the electors. This will be worse if there is antagonism between the different levels of authority because they have different political complexions. We are, of course, accustomed in this country to a single directly elected central government with one or two layers of elected local government. In our system the elected authority responsible for the larger geographical area is given powers and status greater than the authority for a

smaller area or sub-division. This has always worked best when the responsibilities of these levels of government have been clear-cut and in respect of different functions so that the higher authority is not all the time seeking to pull decision-taking away from the lower. Conflict situations arise when responsibilities overlap and this is likely when there are too many levels of authority. In two or so years time a directly elected European Parliament will be in existence and it will probably seek wider powers than the present European Parliament. If it does I think it most unlikely that the United Kingdom Parliament at Westminster would be prepared to accept it as in any sense a superior Parliament because its responsibilities cover a larger geographical area. At the same time Scotland will have an Assembly and in the view of most people both in Scotland and outside will have far too many layers of government.

The developments I have been describing could also have effects on the nature of our politics, and the way government is conducted. I have already suggested that sharp divisions of opinion may develop as regards European versus Member State objectives, United Kingdom versus Assembly objectives and central government (whether Westminster, Edinburgh or Cardiff in this sense) versus regional and local objectives. As regards the first, I think it unlikely that it will lead to any changes in party divisions within the United Kingdom; though it might affect the way national delegations combine in a European Parliament. But clearly the rise of nationalist parties in Scotland and Wales has already affected the balance of parties in the United Kingdom and as a consequence has brought about a form of coalition and a change in policies. This and other factors have created a renewed interest in the electoral system and the bid for some form of proportional representation to be introduced for one or more of the elected levels. In the past it has been a standard argument that proportional representation leads to a multiplicity of parties and the absence of clear-cut majorities. For this reason the main parties have always favoured the 'first past the post' electoral system. With a growth in the number of parties before the introduction of proportional representation, the chances are that the first past the post candidate has a minority of total votes cast and this leads in turn to arguments in favour of proportional representation. The traditional claim of government that they have a mandate from the electorate is less convincing the smaller the proportion of total votes which were cast in favour of the governing party.

As regards the way government is conducted, this is always changing without anyone noticing it. Consultation and negotiation become more and more the order of the day. Parliamentary and non-parliamentary institutions rise and fall. Direct appeals to the public via the media (especially television) are seen as an essential part of the governing process. Different people come to the front in politics depending on where their mastery lies, whether with the party, with Parliament or with the

media. Modern governments have to be a mixture of those talents as well as of differing shades of political opinion within the party.

For all these reasons I believe that we are in a period in which there will be a lot of discussion of constitutional changes and probably considerable actual change. I fear that the total effect of the changes I expect will be both to reduce the citizen's understanding of how he is governed and as a result to weaken confidence in governmental processes as such wherever they are conducted, at least for a time. If this is so, the more central government seeks to intervene in the economy the less powerful it will become, because it will have to rely on an ever-increasing number of bodies and individuals to do what it wants. Those people in this situation will bargain and make terms. If you believe that elections should determine policies, that policy choices should be clear-cut alternatives, and that there is, or should be, a wide range of possible alternatives, you will not enjoy the general situation I have forecast, because it is one which creates the need for consensus policies, inter-party deals and bargains with pressure groups. Without such arrangements, it will be difficult to put central government majorities together, to get the various levels of government to function without friction, or to get the hoped-for responses from the country. If, on the other hand, you believe that elections should merely determine which individuals should form governments you may be less troubled, though even then you may have to get used to seeing some very unexpected bedfellows in governments.

Conclusion

To sum up, I see a continuing trend in the United Kingdom which is reducing the relative power of the central executive at Westminster. This is the product of a number of factors, many of which are continuing and which will be likely in my view to produce further changes of a constitutional kind. This is not incompatible with a lot of 'government' but this will be spread between many levels (probably too many levels for constitutional stability). It could, however, compel greater stability in policy throughout the whole system of governmental authorities. If it does not, there will be a lot of friction in the system.

Framing Targets for Accountability

B. M. CURRIE

Brian Currie is Managing Partner, Arthur Andersen & Company. The article that follows is based on a talk he gave at a seminar run by the Institute of Cost and Management Accountants, in conjunction with the Chartered Institute of Public Finance and Accountancy, on 23rd May 1978. —*Editor*

Introduction

I have worked with many organizations in the private sector and in recent years with a few in the public sector. At different times I have served as a member of junior management in each sort of organization and as a member of high-level management in each sort of organization. I should record that I have always found many similarities in the ways the different sectors tackle problems. There are some differences. It is the similarities that make the differences more striking.

The differences that I observe are not those that are reported in the Press or even necessarily by committees of the House of Commons. They are important differences but it is easy to exaggerate their importance. In discussing the differences it is easy to sound as though one is criticizing. The truth of the matter is that both sectors have much to learn from each other in the ways they approach similar tasks.

I doubt if useful changes can be initiated either in the Civil Service or in the commercial world merely by injunctions and recommendations, whether those injunctions and recommendations are made in the Press, by speeches in public places, by White Papers, by committees, or even by Acts of Parliament. These things may all help in the motivation of change (though I suspect they may also obstruct by breeding defensiveness). They do not in the end cause change, any more than changing the rules of the game or making loud noises on the touchline can alone make a team play a better game. Improvements in the performance of players are generated by hard work at the coaching and skill-teaching level and by leadership and enthusiasm within the team. I apologize if this is an inept or old-fashioned metaphor. But I do believe that *worth-while* changes are made by skilled and enthusiastic people within organizations, not by any factors operating externally. I suspect the Civil Service has had as many external encouragements and inducements to change as it needs for the time being. What it probably needs now is help, skill and coaching in seeing *how* to make the changes and in making them effectively and economically.

The purpose of this article is to offer some ideas about the structure and approaches that I think will help to meet these needs.

Administration contrasted with management

In some senses the Civil Service appears more likely to be slow in making such changes than other types of organizations. I am not alone in noting such a distinction. I noticed that Sir Derek Rayner began his evidence to the English Committee by saying:

> Efficiency in the Civil Service is dependent, as in business, on motivation, and whereas in business one is judged by overall success, in my experience the civil servant tends to be judged by failure. This inevitably conditions his approach to his work. . . .

Many of those who gave evidence to the Committee (including those of us who represented the Consultative Committee of Accountancy Bodies—CCAB) noted this sort of contrast. It is not a criticism of the Service, but rather an observation of a phenomenon which causes difficulties in the development of management techniques in the Service.

A useful presentation of these contrasts at their extremes is set out in table form by Desmond Keeling in *Management in Government.* I quote from some of the headings under which he draws contrasts between administration systems and management systems:

	Administration	*Management*
SUCCESS CRITERIA	Mistake avoiding	Success seeking
RESOURCE USE	Secondary task	Primary task
ROLES	Arbitrator	Protagonist
ATTITUDES	Passive: workload determined outside system. Best people used to solve problems	Active: seeking to influence environment. Best people used to find and exploit opportunities
	Time insensitive	Time sensitive
	Risk avoiding	Risk accepting but minimizing
	Emphasis on procedure	Emphasis on results

I would add to this list some contrasts I observe:

Information needs:		
BACKGROUND	Precedents	Forecasts
FOR DECISIONS	Proof	Enough evidence to act
FEEDBACK	Appeals and appeal decisions	Achievements. Resource changes

Mr. Keeling makes the suggestion that administration systems lie close to judicial systems and like them derive many of their characteristics from the need to avoid mistakes because mistakes may represent miscarriages of justice, unfair treatment between cases and so on.

I accept this. The arguments are complex but there are many areas

of public policy, public spending and the use of public resources where a measure of fairness is important and where the need for fairness goes part of the way to justifying administration-type systems rather than management-type systems. But let me express one caution. Because judicial systems are slow, consultative, bound by precedent and bureaucratic they are costly. Slow and costly justice may not be the best justice—it may indeed represent injustice.

I also suspect that whilst absolute fairness in the disposition of public resources may have been important when the public resources were small, priorities may be different when public resources constitute a majority of the national resources. The costs of fairness may exceed the benefits to the individuals of being fairly treated (remember Dickens' account of Chancery). Certainly the cost of fairness often exceeds the potential loss caused if some recipients gain more than their shares.

There will therefore be a number of areas of administration where quasi-judicial roles are exercised; and the targets for these areas must continue to be expressed in appropriate terms. Targets must be set in terms of mistake-avoidance and accountability must be exercised in the same terms.

Let us avoid one confusion. Administration consumes resources. It therefore has to be managed. But this does not remove the contrast between the processes of management and administration. They are different systems even if the one man has to use both in the same day.

A moment's thought will help us avoid another common mistake—a conclusion that any area where it is important to avoid mistakes, or where the public interest or safety is involved, ought to be subjected to administration procedures rather than to management. 'Zero defects' is a manufacturing management slogan—and there are huge areas of commercial industry where managers hold great responsibility for the lives, health and safety of members of the public. Product design, product planning and quality control are all areas where mistakes must be avoided. They are all measurable accountabilities of commercial managements.

Above all, we must try to avoid the use of administration-type systems where they are not necessary. To apply the 'defensive' administration-type approach to decision-making in a management context is inevitably to waste management resources.

Management

I define management as 'the series of processes leading to deployment of resources in a time scale to achieve an objective'. Different parts of this definition are important for different purposes. The 'series of processes' spans all the activities which precede a use of resources, from the formation of an intention (policy) through planning and communication to the leadership of execution tasks.

Those who segregate policy formation from planning, and planning from execution, splinter the management process into pieces I would

prefer to see as one ('the whole task'), but this is no conclusive bar to efficient management. The only point I would observe is that if you take the responsibility for initiating the policy and the plan away from an individual who is to execute it, you must find alternative ways of convincing him of its rightness and its viability. Authorship gives rise to a sense of accountability that is not easily achieved by other means.

Policy objectives

Now how do we frame the targets for accountability in the public sector? Clearly they must relate to the achievement (or maintenance) of the policy objectives to which accountability is directed.

In an ideal world I would have a rule which laid down that nobody would be allowed to set a policy objective unless at the same time he defined how we would know whether it was being achieved! But even in such a world we would lack direct measures of output for our government activities. The reason is that one government activity often contributes to more than one policy objective (enforcement of vehicle load regulations contributes both to safety and to the reduction of road damage) and several activities may contribute to one objective (the enforcement of regulations and the construction of motorways both contribute to safety).

These well-known difficulties in measuring outputs sometimes lead those working in government to express doubts as to whether measures of performance and effectiveness can ever operate as well in the public as in the private sector. The most frequent comment is that commerce and industry have the profit measure as the token of management effectiveness. To quote:

> By contrast a private sector institution . . . has a measurable test, namely, profitability, which it not only can use but is virtually forced to use in order to survive.*

> The first and most obvious (difficulty) is that we lack the common yardstick of profit.†

Examples are legion. But I doubt in fact if the profit measure is as much use in measuring the performances of the commercial or industrial management as you may suppose. There are a number of points to observe:

(1) Many of the decisions taken by private sector managers have an effect on profitability that is so indirect that it cannot easily be ascertained. A commercial manager is continually trading off estimated costs against rather putative and rather intangible benefits: the costs of higher stock levels against the benefit of better

* 'The Problems of Civil Service Management' by Sir Douglas Allen, *MSIG*, Volume 32, Number 1, February 1977.

† 'Management in Government' by Richard Wilding, *MSIG*, Volume 30, Number 2, May 1975.

customer service; the costs of better information against the benefits of better decisions; the costs of better production conditions against the benefits of better morale.

(2) The importance of the long-term survival of the business often outweighs shorter-term profit considerations. It may be more important to retain a reputation for product quality, for example, than to meet a sudden surge in demand, etc.

(3) Ethical and moral considerations weigh heavily in the private sector and frequently serve to demote the profit motive.

(4) A large proportion of managers in the private sector operate in areas of their business where their contribution to profitability cannot be directly measured; for example, those in indirect functions such as personnel, production control, industrial relations, finance, etc. In a poorly-run company their accountabilities may not be well identified: in a well-run company they will be clear.

(5) There is no certainty that good managers will make a profit, nor that bad managers will make a loss, and only the innocent investor would suppose this to be so. It is easier to be profitable in some parts of the economy than in others and this far outweighs the abilities of managements. The best of managements are hard put to it to keep some heavy engineering companies afloat. Nobody in his right mind will keep changing the management in the hope of finding a team which can bring prosperity in an ailing sector.

Do not let me overstate this. There are many situations where profitability is a superb target and a good indicator. But it is very far from being the universal criterion sometimes supposed by those in the public sector. There are many other forms of performance indicator which are worth copying.

Policy accountabilities and execution accountabilities

In those parts of the private sector (and you will see they are many) where there is no direct relationship between the manager's job and the main corporate goals, the manager's performance will be judged by measuring his achievements of intermediate goals. An airline pilot is responsible for getting his passengers from London to New York and he is not overmuch involved in immediate considerations as to how far that serves the overall aims of the airline (and it may be adverse in the short term, e.g. if he only has five passengers in a large aircraft). This will remind us that not all accountabilities need be related to the objectives of the organization as a whole.

One of my partners, David Kaye, has developed some terminology and definitions which I find useful in understanding the structure of public sector accountabilities.

The end result of policy formation and execution ought to be an *impact* on the subject-matter. Forming and executing policies about hospitals and about doctors has an impact on the population's health.

Comparing the impact achieved with the inputs of resources required leads to judgements about value for money. If you can quantify inputs (usually possible) and impact (usually difficult) you have an indicator which can be used for comparisons—perhaps with other regions or other countries, perhaps with previous time periods.

$$\frac{\text{Impact}}{\text{Inputs}} = \text{Value indicator}$$

The trouble is that it is often very difficult to quantify impact. However, it is almost always possible to analyse the chain leading from input to impact. Above all it is usually possible to analyse *and quantify* all the links in the execution part of the chain. If you can quantify the inputs and outputs for the execution process you are providing indicators for measuring the efficiency of the execution process.

$$\frac{\text{Outputs}}{\text{Inputs}} = \text{Execution efficiency}$$

The rest of the formula is then:

$$\frac{\text{Impact}}{\text{Outputs}} = \text{Policy efficiency}$$

If impact can be quantified, the result is an indicator which helps in the discussion: 'How well directed are the means chosen to achieve the desired end result?'

So, to recapitulate: the choice of means for implementing a policy is made at high level, is often seen itself as a policy decision, and may well be a political decision. The means may be more effective (in relation to each desired impact) or less effective than an alternative. But there is generally a choice of means—the population's health may be improved by more hospital beds or by better use of general practitioners. The discussion about this choice is a discussion about the effectiveness of the means.

Once the means for implementing a policy has been determined, the rest is execution, and an analysis of the execution process ought to lead to conclusions, *inter alia*, about efficiency.

$$\frac{\text{Outputs}}{\text{Inputs}} = \text{Execution efficiency}$$

What I think is important is that the accountabilities for means choice and execution should be separately identified and measured. We need a clearer language, a more generally accepted terminology, for making these distinctions because so much confusion is introduced into the discussion of accountability by blurring the distinctions. David Kaye has made a useful start on this.

Even so, execution efficiency is not a simple matter. Many units in a

department may make a contribution to a single end objective. Some units may provide intermediate outputs which other units use in the accomplishment of the objectives. Some units can only be measured in relation to intermediate outputs which may be no more than measures of activity.

Measures of activity can easily lead to wrong conclusions and can seriously distort the behaviour of the units themselves:

> To measure the effectiveness of police or traffic examiners solely on the number of prosecutions undertaken might lead to those accountable directing their resources towards prosecutions which are easily accomplished (i.e. for petty offences by the law-abiding) as against prosecution for major and more-difficult-to-prove offences.
>
> Measuring hospital performance on the number of patient bed-days utilized might encourage those accountable to prefer long-stay patients since their demands on administration and treatment may be less.

This sort of problem is not peculiar to the public sector. Similar mistakes are easily made in the private sector. For example, in developing production scheduling policies which will determine the behaviour of foremen and section leaders in a machine shop—it is often sensible to set rules which give priority to the long-run jobs with small set-ups. If these rules are not carefully defined, the more difficult one-off jobs may get delayed unacceptably—creating a reputation for poor service and damaging the factory's image in the market place. Great care is needed in setting targets for accountability to ensure that they really respond to management's policy objectives. A near-miss may do considerable damage!

I have been describing traps for the unwary. But the existence of such traps would be a poor reason for not advancing. Some excellent progress has been made in some parts of the public sector and it is plain that practical experimentation is the best way to spot the traps and avoid them.

Accountability—A state of mind

Let me say a word about the establishment of accountabilities. The Fulton Report (paragraph 150) defined its use of the term 'Accountable management' as 'holding individuals and units responsible for performance measured as objectively as possible. Its achievement depends upon . . . units where output can be measured against costs or other criteria and where individuals can be held personally responsible for their performance'. I have always been unhappy with some aspects of this definition of accountability:

(*a*) The expression 'holding" accountable seems to me to get the psychology wrong from the outset. I always emphasize the need to secure a commitment and enthusiasm from the accountable manager. An accountability works best if it is undertaken; worst if it is imposed.

(*b*) The emphasis on individual accountability lies at the root of some management problems in the Civil Service. Individual accountability is a useful organizational concept for solving certain types of management problems, a positive handicap in others. In particular, team accountabilities and organizations work better in certain types of project management situations. It is important to watch for such needs and ensure that the organization matches the needs.

The role of management accounting

The rest of the definition, 'measuring output against costs or other criteria', is an important statement about the objectives of any management. The ingredients of a target are:

(*a*) A quantitative statement of the output target including standards for the quality of the output.
(*b*) A quantitative statement of the input target in terms of the resources to be consumed.

These are also the ingredients of cost centre accounting. A cost centre is 'A location, person, item or group of equipment (or an activity) in relation to which costs may be ascertained and related to units of product or service'. A major function of cost accounting is to transform cost information expressed in terms of inputs into cost information relating to outputs (and note that I have referred to outputs only in quantity and in cost terms. Though there is occasionally some point in attributing a value to outputs, it is usually a waste of time). This helps a manager to understand how costs behave in relation to quantities of output in his area so that he can exercise his responsibilities to control his costs.

Sometimes a manager misunderstands what is meant when he is given an accountability to control his costs and his output. He objects that he cannot exercise such control. To quote from a previous paper I wrote:

> By 'control' he probably means that he cannot by diligent or aggressive action change the level of costs because they are fixed or are entailed by his given level of activity. In fact this is often not a useful sense of the word control. There may be some costs that he can so control. But more often 'control' and 'responsibility' should mean to the cost centre manager that:
>
> (*a*) He understands how level of activity and cost behaviour interrelate in his cost centre.
> (*b*) He can therefore plan the costs for his planned levels of activity (and these should underlie the departmental estimates).
> (*c*) He will monitor actual activity and costs by using his management reports.
> (*d*) He will detect departures from plan.
> (*e*) He must then consider his alternatives:
>
> (i) He may be able to alter or arrange for an alteration to his cost or activity levels.

(ii) If he cannot, he must consider whether the departure from plan calls into question the need for his activity or the means of performing it.
(iii) He must in either case revise his plan immediately so that the changed estimates of cost or activity levels are reflected in the broader plan for his department.

When management situation is described as being 'out of control' it is generally because much of the above process is missing completely, seldom because the manager is unable to perform (*e*)(i).

It is (*e*)(iii) that is most needed in government. Because accounting officers and others have come to view funds budgeted or estimated for their programmes as funds politically 'committed' to their policy objectives they may be reluctant to revise downwards their estimates. It is a real problem that in government an estimate represents both a forecast and a commitment. The two have to be separated if the process I describe is to be made to work and to provide good input into the overall control systems like FIS.*

There are, of course, many other accounting techniques besides those related to cost centre accounting. Equal in importance in the public sector, I am sure, are all those concerned with project accounting and control. Projects make a louder clatter when they go wrong than do continuing activities, and that is why it seems to be project disasters that mainly attract the attention of the beholder. Project disasters (when well developed) are also easier for auditors to identify than activity disasters and there is a danger therefore that they may spend more time looking for them.

Most projects (like most activities) go well, of course, because they are managed well. Everything I have just said about managers' accountabilities in ongoing activities is equally true in project work. Managers equally need good planning information, good feedback and have the same accountabilities for replanning and remedying.

Reporting

If we succeed in setting the targets meaningfully and in a right way which will encourage managers to respond to the right objectives, how is the information to be reported?

I have always seen management reporting as being as much a matter of motivation as of information. It has been my principle that information about performance in relation to targets should be given first to the manager himself. He is the one who in the first place has to interpret the indicators and decide, if he is off course, how he is to recover the situation. He is the one responsible for reformulating plans as well as taking corrective action. He also is the one responsible for communicating his conclusions and the likely outcomes upwards through the management chain, and he should be able to do this in such a manner

*See 'The Financial Information Systems Project' by F. E. R. Butler and Dr. K. Aldred, *MSIG*, Volume 32, Number 2, May 1977.—*Editor*.

that by the time indicator information is formally reported to higher levels of the organization it has been preceded by informal information about corrective action already taken.

This is the way that good and effective accountable management of any kind works. If a superior has to ask a subordinate about a problem which the subordinate has failed to observe or failed to address, the psychology of the situation begins to go wrong. The superior has to do something because he has his own accountabilities in the matter, but the wise superior recognizes that too much questioning, interference or criticism from above will drive his subordinate on to the defensive. Good bosses devise ways of getting messages to their subordinates which don't involve needless conflict.

One can exaggerate the psychological importance of this process, but it is very easy and very common for senior management to put junior management too much on to the defensive. Junior management then sets too high a priority on creating alibis, distorting information ('playing the numbers game') and creating defensive support systems (such as passing decisions up instead of making them himself, seeking to involve others in the decision when he might have taken them on his own, etc).

Indicators are therefore primarily for those who are going to use them. They may be reported upwards through the organization but ideally only after the lower levels of management have solved the problems disclosed by the indicators, so that their account of the solutions can precede or accompany the indicators of the problems. At each level, management will only act if it is not satisfied with the account it receives of the indicators and the actions taken at lower levels.

Inevitably indicators become more summarized at progressively higher levels of reporting within the organization. At high levels it becomes relatively difficult to make judgements as to how things are going lower down purely from observation of indicators. Indicators may show a considerable departure from the financial plan or a considerable departure from quantitative aspects of plans (tons delivered, bed-days utilized, vehicles inspected), but the indicators themselves will not enable management to judge whether their organization is in control of the situation (and 'in control' means understanding it, remedying it where possible, and reformulating plans: it does not mean bringing the whole programme back on to target, which may be impossible for extrinsic reasons). Only the reports of remedial action help with this.

Higher management's role

Higher management's task is to judge whether major changes of plan are required in the light of achievement, whether further resources need to be brought to bear on the problems or whether fresh controls, a different organization or different people need to be used at the lower levels. Most of these are difficult decisions and can only be effected infrequently. Most importantly they cannot be reached from the

indicators alone, though the replanning data and accounts of remedial action taken will help.

High levels of management develop various styles for determining what and when major corrections are necessary. They may walk the floor themselves so that they can sample morale and results at many levels of the organization. They may use *aides* or consultants or auditors to reinforce the normal management chains of command about problems. Above all, higher levels of management will not criticize or themselves feel vulnerable to criticism for simple failure to forecast in an uncertain world (and this includes taking the wrong decisions because the outcome could not be foreseen). They will feel vulnerable to criticism if they did not have the right information, the right systems, the right people or the right organization to tackle the problems whose nature *could* have been forecast.

If our airline pilot lands his passenger aircraft in a city far distant from his supposed destination, he is not automatically criticized. Indeed, he may be praised for having landed the aircraft at all! The matters for inquiry are whether there were factors which obliged him to do as he did, whether he was on top of the situation in terms of knowing how his plans had to be varied and what the consequences would be and whether he had the systems and equipment that he required to deal with the contingencies he faced. His accountability cannot be measured in terms of his success or failure in achieving the original target—only in terms of how well he managed.

Parliament's role

In recent years there has been renewed emphasis on the concept that there ought to be some sort of overall performance indicators for some (if not all) Civil Service activities which would enable Parliament to 'know whether or not the Civil Service was doing its job'. This thread runs through the questions that the Expenditure Committee asked of witnesses during the 1976–77 Session.

In my view the root problem about any indicator or set of figures which could be devised for this purpose lies first in the question, 'When you have the indicator, what follows?' Parliament and Parliamentary Committees don't have the time needed to analyse the conclusions to be drawn from the indicators, nor do they have any courses of action which are likely to be very effective in helping things to improve at the execution level. Historically Parliamentary Committees have criticized where something is wrong. Criticism engenders over-defensiveness and does little to cure a specific problem on the ground.

So indicators are primarily for use by managers who are going to do something about them in the executive and operational sense, or possibly in the plan or policy change sense; but not for those who wish to praise or blame. I have already indicated above what I believe is a proper cause for praise or blame and this to my mind ought to be the proper role of Parliament. Parliament should be content if it can satisfy

itself that departments have effective systems and organizations to achieve the tasks they have to achieve. But this is all-embracing. If the people are inadequate there must be fair systems for ensuring that management replaces inadequate people. If organization is inadequate there must be a system for ensuring that the organizational inadequacy is identified and changed before too much damage results.

Ingredients for a better system

How, ultimately, Parliament can make such judgements about all these things raises a number of serious constitutional questions which I don't want to answer. There are some possibilities which need rather cautious exploration. If I merely mention some of the ingredients of what I think might be a better system, you will see the problems:

(1) More meaningful routine reporting by departments to Parliament and the public about their policy objectives, about how they measure progress towards them, and what resources, systems and organizations they use to do this. I really believe this will be necessary to cure the suspicion aroused by the present inclinations of departments towards confidentiality.

(2) Some redirection of the interest of Exchequer and Audit away from error, loss and maladministration (except in those quasi-judicial contexts where error avoidance remains the prime accountability) and towards broader and, in my view, more useful questions as to whether departments and units are equipped with systems which will prevent the undue recurrence of error, loss and maladministration and will assist them in achieving the targets for which they are accountable. Such inquiries could run a decisive step further—asking the same questions about organization and about people as about systems. But that would come much later because it would require new and different skills in Exchequer and Audit. Others would say such an extension should remain, as now, a part of the occasional management review process assisted by CSD and Treasury.

(3) Parliamentary committees would need a different sort of membership and undoubtedly more time from their members to achieve the different sorts of objectives I propose. Time is the greatest problem, of course, and I have some doubts as to whether it could be made available. CCAB's supplementary memorandum to the English Committee (paragraph 46) outlined the sort of roles that such committees should undertake and laid some emphasis on the need to praise and encourage as well as blame. Individual members of the committee to whom I have spoken appreciate the objectives but have expressed serious private reservations as to whether members could spare the time or indeed muster the motivation to do the job properly.

I have always found public servants receptive to ideas about manage-

ment accounting and all the other tools of good management—when they can see how to apply them to their own situations. Where they are unable to see how, it is not so much because they do not understand the techniques as because they have difficulty in seeing which parts of their activities are of a management nature and which are not. I find that they often underestimate the management content of their activities. I therefore see the priority as being to help civil servants conceptually to identify the respects in which they are managers and should have management targets and use management techniques, rather than initially to dwell on the techniques themselves. They will learn the techniques when they see the need.

I hope I have emphasized clearly enough where it will be easiest to make early progress. It will always be difficult to set targets for policy-makers and measure their performance—though I believe progress will be possible when more achievement information is available from the executors of policy. But in the executive activities of government it ought to be possible to make early and useful progress. The main requirement is to be clear about what can be achieved easily and what cannot. As I see it the main need of the Service is to help more people get the right sorts of systems going at the right levels and train them in using the systems in the right frame of mind. Practice and experience will then carry the process forward. It will be a workmanlike rather than a glamorous process but it is one of the most important of the tasks facing the Civil Service. Meanwhile we must set out to encourage some of the other changes I have mentioned which must proceed in parallel.

Openness in Appraisal in the Civil Service

The article that follows has been contributed by staff of the Personnel Management 4 Division (PM4), Civil Service Department. —*Editor.*

Introduction

Whether and to what extent staff should know what is written about them in reports on their performance are questions of continuing interest to those concerned with the theory and practice of personnel management inside and outside the Civil Service. In March this year, the Official and Staff Sides of the Civil Service National Whitley Council concluded an agreement which introduces greater openness than hitherto into Civil Service staff reporting and appraisal procedures. Briefly, the new arrangements provide that certain parts of the annual report written on an individual civil servant may be disclosed during the course of a structured interview or discussion with that individual, and that certain markings may on request be disclosed in writing.

The Civil Service, with some 500,000 non-industrial staff, has been developing its reporting and appraisal procedures over a number of years and the purpose of this article is to describe how, in relation to the Civil Service system, the issues raised by greater openness were resolved. To do so, it is necessary to explain how the Civil Service's staff reporting and appraisal arrangements have developed since the early 1970s. While there is now a good deal of standardization, not all the elements of the system described below are applied in full, or in the same way, by all Government departments, since individually they retain a wide measure of discretion, in particular in setting the pace at which changes are introduced and in adapting centrally agreed procedures to fit particular departmental circumstances.

Staff reports

Prior to 1971 there was a centrally published 'model' staff report form, but each Government department was free to design and use its own staff report form. For a unified Civil Service this had drawbacks. People moved between departments; parts of departments were amalgamated; sometimes, for various reasons, it was necessary to compare people serving in different departments or in different occupational groups. Clearly, there was merit in having regular (annual) reports in a common form and with common standards of performance assessment for staff throughout the Civil Service. Standard report forms were instituted in the Civil Service in 1971 with the agreement of the

National Staff Side; they were in use throughout most of the Service by 1973. Two versions of the new form were introduced. The main form is for staff at Clerical Officer level and above, up to and including Assistant Secretary level and their equivalents in specialist and professional grades. A second form is somewhat simplified, but is based on the same principles, and is in use for staff below Clerical Officer level. The training of some 150,000 Civil Service reporting officers in the use of the new form was achieved quite effectively and economically through the use of a specially prepared programmed learning textbook, together with notes which have been prepared for the guidance of reporting and countersigning officers.

The emphasis of the report form is on performance in the past year. Each report starts with basic details of the officer and a job description normally agreed between the officer and his or her reporting officer (who is usually the immediate superior). The reporting officer comments on the overall performance of each part of the job, and gives a performance rating on a six-point scale. This section of the report is followed by a more detailed analysis of particular aspects of the officer's performance covering intellectual and personal qualities and abilities; here too, each aspect of performance is marked on a six-point scale and there is provision for written comment as well as a column showing the importance of any particular attribute in the job in question. The subsequent sections of the report look to the future and contain recommendations for training and for the officer's next job, as well as an assessment of his or her immediate promotability and longer-term potential. The reporting officer completes the report with a narrative of any more general points which are not catered for elsewhere in the report. The countersigning officer (who is usually the immediate superior of the reporting officer) provides a second opinion of the person reported on, particularly with regard to promotability and potential. In some departments there is also provision for a third signatory who may be the head of division, region or profession.

While there are some variations in practice between one department and another, this is the general method by which information on the performance and potential of members of the non-industrial Civil Service is collected and transmitted each year to Personnel Divisions. It is a thorough system, and necessarily so; the annual report is central to personnel management in the Civil Service. Government departments are large organizations and good personnel information, via the annual report and other sources, is the basis upon which decisions about postings, promotions and other career events are taken.

Performance and career discussions

In practice, many Civil Service line managers have always seen it as part of their function to discuss regularly the performance of members of their staff with them, and these discussions are not necessarily related specifically to the reporting system. Furthermore, where performance

is failing to reach acceptable standards, the line manager is expected to let the person concerned know, and there are long-standing arrangements for formally notifying staff if they are the subject of an adverse report. Apart from this, it has not been the practice in the Civil Service specifically to disclose to the person reported on the actual contents of staff reports. Nevertheless the importance of effective feedback to staff about their performance and their longer-term career prospects has long been recognized, and in the early 1970s two types of interview were introduced or developed for this purpose: the Job Appraisal Review and the Career Interview.

Appraisal interviews had existed on a small scale for some time, but they were limited mainly to junior staff during their first few years of service, or immediately following promotion. In 1970 the decision was taken to extend Job Appraisal Reviews to staff in all classes and groups up to and including the level of Assistant Secretary. As the name indicates, Job Appraisal Reviews provide an opportunity for a member of staff to discuss with the line manager (usually, but not necessarily, the countersigning officer of their annual report) the job they have been doing in the past year and to plan for the year ahead. The discussion centres on a review of the job rather than of the qualities of the individual and it is intended as a two-way exchange. In the interview the senior officer helps the individual to identify and overcome problems and to discover ways of improving job performance. In some departments, after each interview, an agreed 'action sheet' is sent to the Personnel Division to assist in the career planning and development of the person concerned. Copies of the 'action sheet' are retained by the individual and the reporting officer. Considerable importance has been attached to these Job Appraisal Reviews as a step towards sounder management in the Civil Service, and once again careful attention was paid to the training of interviewers. The Civil Service College provides a course for departmental instructors, who are then able to organize proper training within their own departments for those who are to conduct the reviews. The courses are supplemented by a film, *The Man in the Job*, and an accompanying training manual. Although the introduction of Job Appraisal Reviews was given high priority, the extension of the system (including the necessary training) to some 500,000 non-industrial civil servants could not, of course, be completed overnight. Nevertheless there are now only a few areas remaining in the Civil Service where Job Appraisal Reviews have yet to be introduced. And in most departments it has been possible to arrange for Job Appraisal Reviews to be given as part of the reporting process, so that completion of the annual report and discussion of the job coincide.

The Career Interview is wider in scope than the Job Appraisal Review and covers the longer-term issues of an individual's career development and prospects. Reporting officers speak with most authority on current performance but their assessments of the person's promotability and long-term potential are valuable, particularly when

taken together with the assessments of previous reporting officers over a number of years. Other factors, external to the job and the individual, are also of importance in considering a person's career development and prospects. Account has to be taken, for example, of the availability of jobs at the same or the next higher level for which the person may be best suited; of the age structure of the department; or of the merits and availability of other candidates for particular posts. The Personnel Division is better placed to discuss these wider considerations with the individual, and the Career Interview provides the opportunity to answer more completely the individual's question, 'Where do I stand?' Many departments have always given career interviews at the individual's request, but since 1970 departments have been encouraged to develop a programme of career interviews on a regular basis. This is now more common practice.

Disclosure of information from annual staff reports

It was against this background of annual reports, Job Appraisal Reviews and Career Interviews, that Civil Service management and unions discussed ways of improving the feedback to staff of the assessments made by their managers of their performance and promotability. Although the discussions and, at times, debate took place over a number of years, this fundamental objective was common to both sides. The differences of view, strongly and reasonably held on both sides, concerned the extent and method of disclosure.

The general arguments relating to the desirability or otherwise of disclosing what is contained in staff reports have been matters for debate amongst personnel management practitioners and students for many years. In favour of disclosure, it is held that it is only by showing the individual what is actually written down that he or she can have a full and accurate impression of the assessments which have been made. Indeed, some say the individual has a proprietary right to the information. It is also argued that if the individual is not given accurate and full feedback, the opportunity to improve performance may be denied and the need for such improvement may not be appreciated sufficiently. Even if an appraisal interview takes places, unless the assessments in the report are revealed, the individual may not necessarily gain an accurate impression of how his performance is rated. Thus, complete and accurate feedback is seen as a prerequisite to improvement and progress, and people need to be satisfied that they are being treated openly and fairly on such an important issue.

On the other side, maintaining confidentiality in appraisal is thought to be important in order to preserve honesty and frankness in reports, and to avoid bland, meaningless reports from which Personnel Divisions would be unable to draw the necessary distinctions for the purposes of selection, promotion, posting and career development. If disclosure inhibits reporting officers from making honest assessments expressed in their own way, or results in inflated performance ratings, the effect

would be a lowering of reporting standards and damage to the integrity of the personnel management systems to which the staff report is central. There is also concern about the possible adverse effects on staff of disclosing reports which draw attention to irremediable faults or defects of character (bearing in mind the extent in the Civil Service reporting system of ratings of personality and other qualities); it could undermine an otherwise satisfactory working relationship and be unnecessarily discouraging if a subordinate sees comments about deficiencies which he cannot be expected to remedy.

This ground was explored in detail in discussion between the two sides, but for some time no way forward could be found. The National Staff Side tended to attach greater weight to the first group of considerations, while the Official Side were more influenced by the second. It was therefore agreed that the scope for progress in the negotiations might be more profitably explored if there was a careful evaluation of the potential advantages and disadvantages of opening reports to the individual. As one part of this process, it was decided to study developments in reporting and appraisal outside the Civil Service and a survey was conducted under the auspices of a Joint Official Side/National Staff Side Steering Group, by a team from the Behavioural Sciences Research Division of the Civil Service Department. The Research Team visited 24 organizations to study their staff appraisal practices, with particular reference to open reporting.

Outside practice

The Research Team's report showed that there was evidence of a movement towards more open reporting in this country. In a number of instances, it was the practice for the individuals reported on to sign that they had seen the section of the report on performance, although the section on potential remained closed in most cases. In a few organizations there was a degree of participation in completing the report, commonly through the provision of a space on the report for the subject of the report to add any comments about the appraisal. However, despite the movement towards greater openness, one-third of the organizations visited had closed or substantially closed reporting procedures and, of the remainder, more than half were not totally open. Most of the organizations with open reporting expressed themselves satisfied with the standard of marking. However, there was some evidence from a review of the literature that openness could lead to greater leniency in rating. Informants in those overseas public services where reporting was open tended to confirm this. On this aspect the Research Team commented: 'It seems that open reporting may lead to a lowering of standards, but does not always do so'.

The survey of outside practice had therefore lent some support to the view that an important disadvantage of disclosing information from reports was that, without confidentiality, the reports might well become bland and less distinctive, making it more difficult for manage-

ment to differentiate between one person and another (which could benefit no one), and even giving rise to an informal supplementary reporting system (which would be objectionable). But it had also revealed that other organizations had gone down the open reporting road without apparently experiencing such problems.

The agreement

Subsequent discussions between Civil Service management and unions therefore concentrated on seeing whether sufficient common ground could be established between the two viewpoints which would preserve the fundamental principles to which each side subscribed. The resulting agreement may be said to have achieved this, by providing for individual officers to have a clearer understanding of the contents of their report, but also preserving that degree of confidentiality which management felt to be essential to honest and informative reporting. The agreement itself sets standards for the disclosure of information from annual staff reports across the Civil Service. In view of the diversity of departmental functions and organizations, the circumstances and practices relating to the processes of reporting, appraisal, career development and promotion vary between one department and another. The agreement therefore enables departments to work out with their staff sides the detailed arrangements for the application of common standards, for example, to decide whether the interviewer should be the countersigning officer or a member of the Personnel Division, how best to introduce the measures within available resources, etc. The remainder of this article identifies the key points in the agreement and explains the reasoning behind them.

Extent of disclosure

The debate concentrated more on which particular sections should be disclosed to the individual than whether the whole report should be open. Indeed, even in those outside organizations which claimed a large measure of openness in their appraisal procedures, less than half of them disclosed reports in their entirety. Of most concern were those sections of the report containing assessments of overall performance, the detailed aspects of performance and promotability, and the discussions highlighted the rather different considerations which apply to each.

Some people are keen to know the markings in their reports on performance and promotability, and it was agreed that such markings should be disclosed at the request of the individual. However, the doubts (referred to above) about the possible adverse effects on the reporting system and on inter-personal relationships were felt to be particularly apposite in relation to those parts of the section describing the detailed aspects of performance, in which the assessments are not primarily results-orientated. The agreement therefore provides for the possibility of the disclosure of markings in this section of the report, but at the discretion of the interviewer. It is for the interviewer to judge

where the balance lies between the advantages of disclosure in terms of effective feedback and the disadvantages in terms of discouragement to the individual and damage to working relationships.

Other recommendations in the report concerning training needs and the officer's next job were already completed after consultation with the officer, and so there is no difficulty in disclosing what is written in these sections of the report. However, the Civil Service agreement specifically precludes the disclosure of the assessment on the report form of long-term potential. Over a period of years, assessments made in this part of the form by a series of reporting officers prove helpful to Personnel Divisions in identifying and developing particularly talented and able members of staff. But one year's assessment, by itself, is of limited value and, if disclosed to the individual, could be misleading, unnecessarily discouraging or raise unfulfillable expectations. Only in a minority of outside organizations are long-term potential ratings disclosed.

Timing and method of disclosure

Having determined the extent to which the contents of reports could be disclosed, consideration was given to how—in writing, orally, or a combination of both—and when it should be done. One point of view is that individuals can only be fully and accurately aware of their superiors' assessments of them if they see the written words in the staff report itself; and that, even if the disclosure is to be conveyed at an interview, it is fair to give written notification of the assessments in advance of such an interview so that the interviewee has a chance to prepare for the discussion. The other point of view is that comment, criticism and encouragement can best be conveyed orally, that undue significance can be attached to criticisms recorded in writing, and that particular remarks can be seized upon and taken out of their overall context. Prior written notification of aspects of the report could be positively misleading because they might focus the individual's attention unduly on particular aspects to the exclusion of other, equally important, topics for discussion. Furthermore, important qualifications can be made during a discussion which cannot be conveyed by a tick in a box or a brief written comment.

Whatever the general strength and validity of these arguments, they bear differently on different parts of the report. The first argument applies mainly to the judgement of overall performance, and the agreement reflects this by providing that, while the overall performance rating should be the subject of a discussion with the individual, it can, if so requested, be given in writing in advance of the interview. The second argument carries greater force in respect of the detailed aspects of performance, and the agreement provides that these ratings should only be disclosed orally, and at the discretion of the interviewer, during the course of a structured interview.

Assessments of performance reflect what has actually been achieved

in the preceding year, whereas promotability is affected by external factors, not related to current performance. The reporting officer is not necessarily aware of the weight of these factors (e.g. the number of vacancies available at the particular time and the relative merits of other candidates in the field for promotion), and could not be expected to take them into account in making the assessment which appears on the report form. It seemed sensible, therefore, to give the interviewer the opportunity of an oral discussion to put the assessment of promotability into the full context of all the external factors bearing on promotion prospects. Thus, initially any disclosure of the promotability marking is to be done orally in the course of a structured interview or discussion, but the agreement provides for subsequent confirmation in writing of the promotability marking as disclosed. This should help to avoid misunderstanding about the assessment of promotability and the realities of promotion prospects. Some departments consider that the Personnel Division rather than the line manager is better placed to discuss promotion prospects. The agreement provides for this.

An important feature of the agreement is that disclosure should only take place if specifically requested and then in circumstances which provide for a structured discussion of performance, development and prospects. Both sides recognized the importance of integrating the arrangements for greater openness into the reporting and appraisal system and the existing arrangements for Job Appraisal Reviews and Career Interviews are readily adaptable for this.

Disagreements

Some people may disagree with comments made about them in their reports, and will want to register their views in a way which will ensure that their Personnel Divisions are aware of them. Management too will find it useful to know if there is disagreement between the individual and the reporting officer. The new procedure therefore provides that the individual concerned should have the opportunity to record in writing, in his or her own words, any disagreement.

Conclusion

Thus, the debate on open reporting in the Civil Service resulted in new, jointly agreed, arrangements for the disclosure of information from annual staff reports. As this article has attempted to show, the arrangements recognize the desirability and importance of staff having a clear and full understanding of where they stand, while preserving the integrity of the reporting system. The complex issues surrounding greater openness in the Civil Service reporting system were resolved in a way which recognized and accommodated the essential interests of management and staff, and at the same time built upon and strengthened the existing appraisal and career development systems.

Teleconferencing: The Meeting of the Future—Now

R. PYE and J. SPRINGATE

Roger Pye and John Springate are members of Communications Studies & Planning Limited, a telecommunications consultancy engaged by the Civil Service Department to advise on teleconferencing. —*Editor.*

Introduction

Once a week the senior executives of one of the world's largest banks—Bank of America, headquarters in California—convene to decide how billions of dollars shall be invested during the coming week. What makes this meeting unusual is that half of the executives are in San Francisco, half in Los Angeles—and that they are meeting via teleconference.* Before adopting a teleconference system the bankers met one week in San Francisco, the next in Los Angeles, and spent many unnecessary hours battling against airport traffic and crowds.

To co-ordinate the Apollo programme, scientists and engineers at 11 National Aeronautics and Space Administration (NASA) research and space flight centres relied heavily on teleconferencing—at some locations up to 40 teleconferences per week took place. NASA staff found that teleconferences made it possible for them to attend meetings they otherwise could not have, and that teleconference meetings were often more objective and less emotional than face-to-face encounters.

ICI's Central Management Service in Wilmslow has operated since 1974 a teleconference system which now covers nine locations in the United Kingdom, and the network is being expanded to include ICI plants in Europe in the near future.

But the Bank of America, NASA and ICI are not alone in their use of teleconferencing. As some readers will already know, the Civil Service Department (CSD) has sophisticated teleconferencing facilities in Her Majesty's Stationery Office (HMSO), Department of Energy and the Scottish Office, and is installing facilities for the Department of Health and Social Security (DHSS), the Science Research Council (SRC) and Natural Environment Research Council (NERC) and other departments. In this article we shall review briefly the background of CSD's adoption of teleconferencing, describe how these facilities

* Teleconference: a meeting between three or more people at physically separated locations conducted via telecommunications.

benefit their users and discuss factors affecting system utilization. Finally, the article will refer the reader interested in investigating teleconferencing, or wishing to discuss any communications problem, to the appropriate CSD officer.

CSD explores teleconferencing

CSD was, in fact, among the first organizations to become aware of the possibilities inherent in advanced telecommunications technology, and to commission a thorough investigation as a basis for its decision-making.

In 1969 CSD contracted for research into the effectiveness of telecommunications in the context of dispersal. In the following year the Post Office became a joint sponsor of the work, which was expanded to a three-year research programme. It was implemented by a newly created unit of University College London's Joint Unit for Planning Research, the Communications Studies Group (CSG), the precursor of Communications Studies and Planning Limited (CS & P Ltd.).

Partly as a result of recommendations by the Hardman Committee that special attention be given to the planning of telecommunications for dispersing departments, Telecommunications Division of Central Computer Agency (CCA) was established. The Division has responsibility for the planning and financial approval of all administrative telecommunications, including that for teleconferencing.

In the course of the telecommunications work, records of over 6,000 meetings were analysed to determine which were suitable for teleconferencing. In addition, laboratory experiments involving over 1,000 individuals (drawn mostly from participants in Civil Service College courses at Sunningdale) analysed the effect of the medium (face-to-face, telephone, microphone or loudspeaker, television) and its purpose (problem-solving, exchanging ideas, getting to know people) on the content and outcome of a meeting. Finally, field experiments were carried out with loudspeaking telephones (LSTs), facsimile machines, remote writing machines, closed-circuit television and remote meeting tables (RMTs).*

Among the research project's conclusions, published in 1973, were the following:

- Teleconferencing would provide an effective and acceptable substitute for meetings to exchange information, solve problems

* Of these media, the only two currently in use by CSD are the LST and the RMT. The LST is familiar to many readers as the 'hands-free' telephone, which facilitates impromptu meetings among several participants at one location, and usually one participant at the other. The RMT consists of a circular conference table fitted with six microphones (one for each local participant) and six loudspeakers with nameplates and indicator lamps (one for each remote participant). The system thus provides automatic 'speaker identification'—a feature lacking in other audio teleconferencing media.

co-operatively and make routine decisions, which is the content of about 50 per cent of all meetings.

- Audio teleconferencing proved in field trials to be as effective and acceptable as video for those meetings suitable for teleconferencing.
- Audio is significantly less costly than video, being cost-effective even at relatively low levels of utilization.

The prototype RMTs were devised by CSG and built by the Signals Research and Development Establishment for the 1971–72 field trials in the Scottish Office in Edinburgh, the Department of Energy in Glasgow, HMSO in Norwich, the Department of the Environment in Manchester, and in various London buildings. The most successful of the trial links have now been fitted with RMTs manufactured by Plessey Ltd. and, as need arises, further links are being added to the network. By the end of 1978, RMTs will be installed in:

- Edinburgh (Scottish Office, New St. Andrew's House)
- Glasgow (Department of Energy, Alhambra House)
- Norwich (HMSO, Sovereign House)
- Newcastle upon Tyne (DHSS, Long Benton)
- Blackpool (DHSS, Norcross)
- Swindon (SRC and NERC, North Star Avenue)
- London (Scottish Office, Dover House; Department of Energy, Thames House South; HMSO, Atlantic House; DHSS, Alexander Fleming House; DHSS, Adelphi; NERC, 3/5 Charing Cross Road; CCA, Riverwalk House).

Switching facilities will enable these RMTs to be interconnected in pairs, and the resultant network will be available to any Government department having need of it.

Teleconferencing saves time and money

CSD recently commissioned CS & P Ltd. to evaluate effectiveness and utilization in the three departments most frequently using RMTs: Department of Energy, Scottish Office and HMSO. The authors gratefully acknowledge the assistance and co-operation of staff of these departments during the evaluation.

The study showed that RMTs are clearly cost-effective on all three links. In 1977 the total savings attributable to teleconferencing, computed by deducting the cost of using the RMT from the cost that would have been incurred by travelling to meetings, were as follows:

Department	*Number of meetings*	*Savings* (£)
Department of Energy	195	52,840
Scottish Office	57	12,540
HMSO	94	5,920
	346	71,300

The findings concerning utilization were similarly dramatic: RMTs were used by higher grade staff (Principal and above) for 55 per cent of *all* meetings involving participants from both HMSO offices (London and Norwich). Use of the RMT was found to be greatest among the most senior people, Assistant Secretaries relying on it to conduct 60 per cent of their meetings suitable for teleconferencing. Yet these statistics should not lead us to conclude that RMT use is appropriate only for higher grade staff. At HMSO, for example, over 50 per cent of the travel between London and Norwich is carried out by staff at HEO level and below. Of these journeys approximately one-third should be suitable for the RMT. Considerable scope therefore exists for increasing RMT use by a broader cross-section of Civil Service staff.

What affects RMT use?

Besides measuring the use of RMTs, the study aimed to determine the factors that affected use, in order to assist CSD in planning future installations for greatest benefit. Three types of factor were investigated: system performance, organizational, and individual. Interviews with HMSO users revealed the following.

System performance factors

One of the most surprising results of the interviews was the apparent lack of importance attributed to the physical performance of the system. Although 91 per cent of users had experienced minor technical difficulties with the RMT, only 18 per cent were in any way discouraged from further use. Most users seemed to accept that the system had some limitations and were prepared to adapt their own behaviour accordingly.

Organizational factors

- Location: The Atlantic House RMT studio is centrally located near the executive suite, which may deter some lower grade staff from taking advantage of the facility.
- Booking procedures: As few users had personally booked a meeting by RMT these procedures seemed unlikely to influence the decision whether to use or not to use the facility. Some users did point out that senior staff have priority, and meetings involving lower grade staff are sometimes cut short to allow senior staff access to the system.
- System introduction, publicity, training: Although little formal publicity or training occurred when the system was introduced, the existence of the RMT is widely known in the department (97 per cent of travellers were aware of the facility) and it is, as previously noted, used at a cost-effective level.
- Incentives *vis-à-vis* travel: While all users were aware that use of the teleconferencing facility saved travel cost and time, only the most senior staff considered the saving in *time* alone a sufficient reason to use the RMT in preference to travel.

Individual factors
These are, not surprisingly, the most difficult to evaluate and interview questions which attempt to elicit such factors can be interpreted as 'loaded', or having critical overtones. Further work needs to be done concerning individual factors in the decision to use RMTs.

As a general guideline for existing and potential RMT users, previous research has identified the types of meetings for which the RMT is most satisfactory. These include:

- transmitting factual information
- giving orders
- decision-making
- settling a difference of opinion
- holding briefings.

Meetings for which RMT is considered 'equivocal' include:

- bargaining
- resolving conflicts
- maintaining good staff relations
- persuading people.

Less suitable for the RMT are getting to know people, assessing others' reactions and discussing confidential matters.

For any individual, the use of the RMT is likely, therefore, to reflect the type of meeting which he most frequently attends. Besides type of meeting, the attitude toward business travel may also affect readiness to use teleconferencing. Obviously, a person whose job requires frequent, routine travel to the detriment of comfort and family life will be more ready to substitute teleconferencing for face-to-face meetings than someone who travels infrequently to interesting places.

The study also touched on the use of loudspeaking telephones (LSTs), finding that the immediacy of a 'desk-top' teleconference facility made it useful for *ad hoc*, usually short meetings for smaller groups of people, while RMT studios were more often used for formal, prearranged meetings.

How to learn more
As a result of this and previous work, CSD has a considerable body of knowledge on teleconferencing apparatus, utilization and behaviour. It appears that these systems could provide considerable benefits to all Civil Service departments. Readers who face communications problems, or who feel that a teleconferencing facility would assist their organizations' functioning, are invited to contact Charles Friend, Central Computer Agency, Riverwalk House, 157–161 Millbank, London SW1P 4RT (telephone 01-211 5632).

Energy Conservation in the Government Estate

H. DIXON, Department of the Environment

Mr. H. Dixon, B.Sc.(Eng.), C.Eng., F.I.Mech.E., A.C.G.I., is Assistant Director, Mechanical and Electrical Engineering Services in the Property Services Agency, DOE. Previous articles on energy conservation were published in the May 1974* and November 1975† editions of *MSIG*. The article that follows reviews the current situation, achievements and pitfalls. —*Editor.*

Introduction

Following an Exchequer and Audit report in 1971, which drew attention to the escalation in the annual costs of fuel and electricity, the Property Services Agency (PSA) set up a Fuel Economy Unit, manned by headquarters staff of the Directorates of Home Regional Services and Engineering Services Development (now Mechanical and Electrical Engineering Services). Early work was concentrated on the further development of Optimum Start Control and the placing and supervision of a national contract for its installation in selected Crown buildings. At the same time, part-time Fuel Economy Officers were appointed in the Regional Headquarters Offices in the United Kingdom to assist in supervision of the contract and to undertake the general promotion of fuel efficiency and economy.

Following the OPEC crisis in late 1973, the impetus and direction of the work was altered to increase the bias towards the improvement of monitoring and control of existing installations. A training programme for technicians and craftsmen was instituted. At the same time, a target for fuel savings was set at 30 per cent of the 1972/73 consumption to be achieved by mid-1979.

In spite of the apparent severity of the target, current indications are that, for the Civil Estate, we are well on the way to achievement. The target has now been increased to 35 per cent without time limit. Some very confident members of the Unit are talking about an eventual target of 50 per cent. Because of the nature of the Defence Estate, the current reorganization within it and problems of accounting for the multiple use of fuels for heating, transport, etc, the current achievement is not as easy to estimate as in the Civil Estate. However, a substantial impact has been made and further action is in hand.

Not all of the original hopes and intentions have been fulfilled. The following review indicates where action has been effective and, so that

* 'The Fuel Economy Unit' by P. E. Henderson, Volume 29, Number 2, May 1974.

† 'Energy Economy in Government Buildings' by H. P. Johnston and A. C. Gronhaug, Volume 30, Number 4, November 1975.

others may avoid the pursuit of unprofitable activities, where solutions have still to be found. It has been a steady principle to avoid any project which does not appear to be cost-effective, to concentrate on those which appear to be most cost-effective and to make the best possible use of scarce trained personnel. All projects are type-tested to obtain conservative estimates of possible benefits.

Training of staff

The greatest shortage is in trained personnel. The controlling staff consists of technicians, originally part-time in the territorial organization headquarters but now on a full-time basis. Training courses for technicians in boiler house practice, controls, etc, are provided at the Mechanical and Electrical Training School at Cardington. Further training results from the continuous dialogue and exchange of information with the headquarters unit as well as the staff in the depots whose work they control. Most of them have the basic academic training on which to build the requisite control theory and practice from the headquarters unit's publications and manufacturer's data. Extra topics for study and application are introduced at annual seminars which they attend; strategies and policies are formulated and agreed and the delegates return to their posts with the basis of an extra programme of work. These seminars have provided a motivating force for real progress, a great deal of initiative in the field and a competitive spirit.

Every technician requires the support of skilled craftsmen to undertake the maintenance and adjustment of the installations under his control. Although the adjustment of burners and system controls can be given to manufacturer's service staff or maintenance contractors, in practice this does not lead to economy in fuel. This is partly due to lack of well-trained contractors' staff and partly due to the difficulty of specifying performance requirements. There are also commercial constraints on contractors which reflect badly on system performance.

Heating, ventilation and air conditioning control systems require a combination of mechanical and electrical skills which are not usually taught to engineering craftsmen. In order to generate the necessary skills, a grade of Engineering Plant Operator (EPO) was adopted and suitable candidates are given a four-week training course at Cardington, supplemented by on-the-job instruction on controls and control systems. EPOs undertake regular inspections of boilers and control sytems, adjust them to produce a high level of operating efficiency, undertake first-line maintenance and report serious faults for makers' or workshop repair.

The foregoing refers mainly to gas and oil-fired installations, most of which are automatically controlled. However, there still remains an element of coal-burning in the Government Estate, justified by competitive prices for large users near existing coalfields. Most of these installations, although they employ automatic stokers, have to be attended and are, therefore, manually controlled. In fact, most large

installations will often operate more efficiently and economically if manually rather than automatically controlled, since a well-trained stoker can predict as well as adjust and can adapt his strategy to changing conditions in the plant he controls. If plant is sufficiently large, the extra cost of attendance is justified by increased efficiency.

Many of PSA's stokers have been trained for and passed the Boiler Operator's Certificate (BOC) of the City and Guilds of London Institute. Over the past 25 years the more general adoption of automatic gas and oil-fired plant resulted in a reduced demand for stoker training and some redundancy among stoking staff. The BOC curriculum changed in emphasis towards power station employees. The training staff at Cardington are currently engaged with City and Guilds in preparing training courses and examinations more suited to our types of installation. It is hoped to resume training and certification when the new courses are available.

Measuring the performance of systems

Reference has already been made to the shortage of personnel trained in fuel economy. Most engineers and technicians are trained for design and production; maintenance and operational techniques tend to be relatively neglected. In order to employ limited manpower resources to the greatest possible effect it is necessary to measure the performance of individual systems, to detect abnormalities and direct attention to them. Since we expect to find serious operating faults, the system of measurement can be relatively coarse. Many of our installations are relatively small and few compare in size with industrial process installations. It was therefore decided to concentrate on medium and large plant where the annual fuel consumption would justify the cost of performance measurement and the costs of extra visits to undertake corrective action.

A specification for a measuring system requires that measurements should be relatively simple and that initial interpretation should be possible without visiting the site. The system should be capable of indicating serious faults within a short time of their occurrence. There has been considerable debate on the best system to apply.

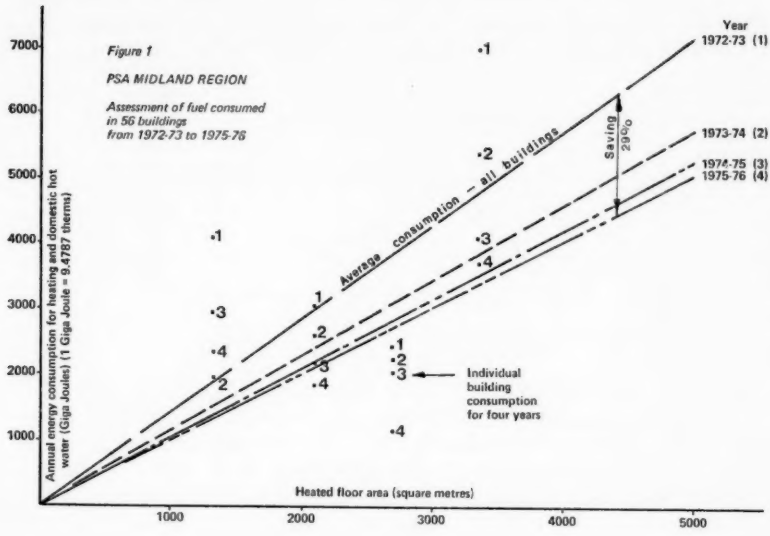
Degree days

The classical method of measuring heating demand is by the use of *degree days*. For a given period of time, the multiple of time and temperature below a given base temperature is calculated and summated. The base temperature is that at which no heating would be required. Theory suggests that fuel used for heating should be proportional to the number of degree days. In practice, the relationship is not proportional because most installations provide domestic hot water, for which the demand is not proportional to temperature. In addition, unless the boilers are actually turned off when the base temperature is reached, there is a standing loss of heat required to maintain the system at

readiness. Degree days are published monthly. In order to obtain a reliable relationship between fuel used and degree days, it would be necessary to operate for 10 months at least. Moreover in any year there are less than nine months of heating season. Thus it would take over a year to establish a relationship and it would be a month or more before a fault was detected.

Target concept

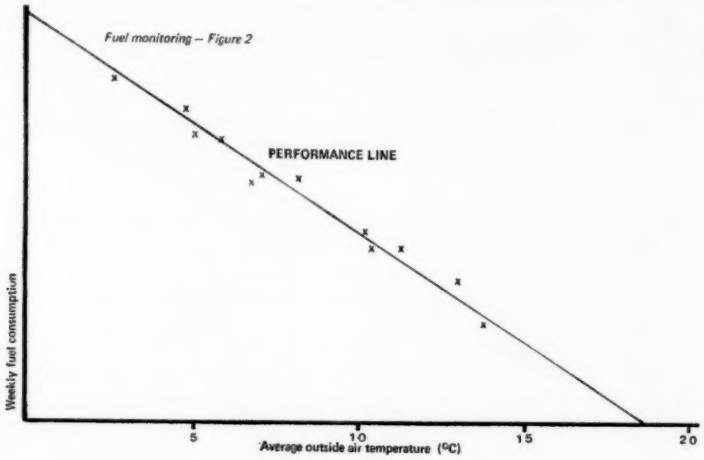
Another suggested method of measurement is to use an index of annual fuel consumption per unit of building volume or floor area. This is the *target concept* and depends on comparisons between different buildings of similar type, such as offices or schools. This is a useful concept for some aspects of energy conservation, but it also suffers from the disadvantage of requiring 12 months' measurement before comparisons are possible and, whilst it will pinpoint the more extravagant users of energy, it is not diagnostic. If extravagant use is due to the type of building and its form and shape, remedies may be quite impracticable. Another disadvantage is that if a building is continuously occupied and heated, it will obviously use a lot more heat than one which is only occupied intermittently. Thus, any target measurement has to be adjusted for occupancy and, unfortunately, the effect of heating-up times is not simple to judge. This system has been applied to a group of 56 buildings in one United Kingdom region over a period of four years. *Figure 1* shows the best-fit lines relating fuel

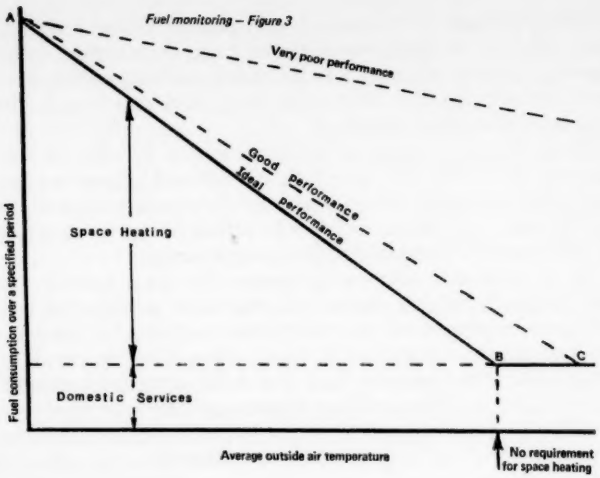


consumption to floor area for the four years. It has demonstrated an overall reduction in fuel consumption by the group over the period in gradual and decreasing stages. As expected, it seems not to have been possible to make extra large savings in the originally relative heavy users.

A new monitoring system

Past experience suggested that for a well-operated installation the sophistication of the degree day system is not necessary. A relationship between fuel consumption and average outside air temperature might be a suitable alternative. This would have the advantage that, for the sizes of installation to be monitored, measurements could be made at least weekly and for large installations even daily. The average outside air temperature could be obtained from the local meteorological station or by daily readings of a max-min thermometer at the actual site. (The latter has proved necessary in some cases.) Fuel consumption could be obtained from meters, if fitted, or from stock and delivery records. None of this would require more than simple clerical skills. The data could be analysed over 12-week periods and, if the relationship were linear, could be processed on a simple desk computer, such as were available in our regional offices. A graph could be produced (*Figures 2 and 3*) showing the best-fit correlation between air temperature and fuel consumption. In addition, if required the computer could provide a control band, above and below the best-fit, within which normal performance might be expected (*Figure 4*). The diagram indicates the proportion of points which may be expected to be within the boundaries of one, two and three standard errors of estimate. A change from these proportions indicates a change in performance.





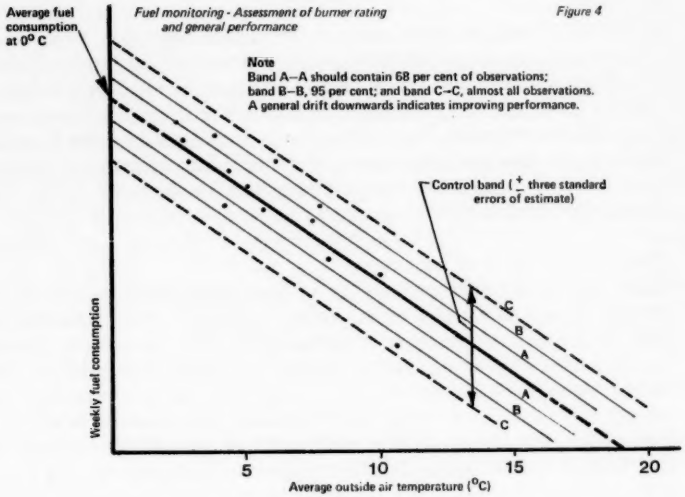


Figure 2 gives the results of field trials which showed that this would succeed for most well-operated installations. There are exceptions, however. If the occupancy of the buildings were variable, the system would not work. This applies to, say, Army barracks, where troops may be absent for substantial periods on schemes, exercises and operations. The problem appears to be marginal and can be overcome by

omitting periods of abnormal occupancy. Unfortunately, during the first 12 weeks of operation of the system, the average weekly temperature was almost constant and provided nothing useful. Fortunately the next period started with a cold snap and continued with a spell of progressively milder weather.

At the last fuel economy seminar, it was decided to test reaction to the suggestion that the system be abandoned. There was an immediate and strong response, when it was forcibly pointed out that this was the only system available to detect when things were going wrong, indicated by a consumption significantly above average.

Up to now the monitoring system has been mainly used to detect installations in which system controls were not operating correctly, so that consumption was not related to weather. In some cases controls were missing, probably due to changes from manual to automatic firing, where the systems had not been completely modified to take account of the different firing system, usually oil or gas instead of coal or coke. Design instructions have been issued to assist technicians to select appropriate combinations of controllers to suit every possible type of system.

In most cases, however, the remedial action is by control adjustment by EPOs or other trained staff. Small portable temperature recorders have been issued to them so that, by measuring typical room temperatures, they can judge the amount of control adjustment required. The intercept on the horizontal axis is adjusted under mild weather conditions by alteration to program controllers. At the other end of the line, the intercept on the vertical axis is altered in cold weather. The recorder is also used to detect the need for adjustment of optimum start controllers, if room temperatures are attained too early or too late in relation to the start of work.

Some further aspects of monitoring

There are some further aspects of the application of the monitoring system which are still being explored. The intercept on the vertical axis measures the weekly fuel consumption at 0°C outside. Under these conditions a burner operating at constant output should be operating about 80 per cent of the time that the building is occupied plus, say, about 25 hours per week for pre-heating, i.e. about 65 hours per week for an office building. If the indicated fuel burnt per week is less than the burner would use in 65 hours, the implication is that it is stopping and starting unnecessarily. A reduction in the burner size may then be possible, resulting in an increase in boiler efficiency. There is probably a limit of about 8 per cent saving on consumption if this is done. However, there are risks of boiler corrosion to be avoided. There is also the possibility that if there is excessive variation in the measured results (scatter) a reduction of burner size based on use of the mean would result in under-capacity. Current investigations are aimed at deciding the amount to allow for scatter.

Scatter is due to a combination of normal errors of measurement, the effects of solar gain and variations in wind speed and direction. It has been suggested that a wide scatter is an indication of a draughty building. There is also a hint that it can be caused by differences in level in fuel storage tanks.

Review of progress

The review of progress in energy conservation undertaken in spring 1977 indicated savings of the order of £20 million per annum against the expected cost of continuing consumption at the 1972/73 level. The capital expenditure had been about £7 million. Assuming a pay back of about three years on the capital expenditure, about £17 million of the saving can be attributed to monitoring and improved control. The extra staff cost involved cannot be more than £2 million per annum and is probably not more than one. Costs are vague because fuel consumption cannot be identified accurately in terms of mass or volume and because many of the staff involved are engaged on other duties as well as energy conservation. Random sample investigations confirm savings of the order of 25 per cent at the 1977 review. Aspects of the on-going work which involve greater capital expenditure are listed below.

Optimum start control has been applied throughout the Civil Estate and work continues for the Defence Estate. It is applied only to buildings which are normally occupied for less than 14 hours per day. For economic appraisal of conversions, OSC saves about 10 per cent of consumption compared with fixed time start control and about 25 per cent versus night depression systems. A second generation of these controllers is now available, using solid-state electronic circuitry, which are easier to adjust for changes in occupancy and simpler to maintain. There also appears to be a prospect of lower prices for them which will increase the scope for their use.

In the Defence Estate systems are being reviewed for the application of OSC and other system controls. In some cases, savings of as much as 50 per cent are expected. This work is proceeding relatively slowly because each system has to be surveyed thoroughly to define the scope for modification. Much of the work has to be done in the summer.

Investigations and field trials have shown that if individual rooms or zones in office buildings can be thermostatically controlled, savings of at least 15 per cent can be expected. The work, which is likely to be relatively costly, involves thorough analysis of the hydraulic characteristics of existing heating circuits to avoid failures. It will probably be limited in scope because of the cost-benefit implications and progress will be relatively slow.

There are many single and multi-boiler heating installations in which the application of improved control techniques would improve the ways in which the boiler output is matched to system demand. Field trials have been mounted in which these methods have been

applied. The prospects seem to be that about 8 per cent of fuel consumption can be saved. Up to now it has been difficult to establish this potential accurately, partly due to the difficulties of finding identical pairs of buildings with identical occupancy patterns. Another problem is that contractors engaged in the work of modification are familiar with conventional control systems and are not easily converted to the new principles being introduced.

In the electrical field, some of our earlier hopes of introducing centralized and automatic control of lighting have not yet been realized. In general, the cost-effectiveness of altering existing wiring circuits is insufficiently attractive. Such improvements, as well as the use of task-lighting, will have to wait until major re-wiring has to be undertaken or the opportunity can be taken to introduce systems in new buildings.

Monitoring of electrical consumption has been improved by arranging for local management to be provided with computer analyses of their buildings, showing consumption trends over three years and drawing attention to cases where there is a prima facie case for changing to more advantageous tariffs.

Particularly in the defence field, work is proceeding with the replacement of existing, relatively inefficient lamps with high and low pressure sodiums. We would like manufacturers to develop plug-in replacements but, in practice, usually have to replace or provide special controllers. These replacements are particularly effective for floodlighting and hangar and workshop systems. There are some applications in street-lighting as well.

We have completed a national contract for power factor correction and are extending the application of maximum demand control, using existing voice-alarm systems.

In catering equipment, the experimental work on the application of timing and thermostatic controls and electronic ignition is being incorporated into new contracts. The savings in this field have been up to 60 per cent in electricity and gas consumption.

For existing buildings, quite a lot of work has been done on improvement by such measures as loft insulation and cavity filling, which are relatively cost-effective. The availability of extra funds ought to enable us to do more of this work, particularly in Service married quarters, for which executive instructions have been issued.

Our architectural group has issued a design guide, *Energy Conservation in New Buildings*, and we hope to reduce the energy requirements of new projects compared with the past. Work is proceeding on the setting of design targets for new buildings, both in PSA and in the Chartered Institution of Building Services. There are some difficult problems posed by the restrictions of sites and locations which may prevent us from achieving ideals. Moreover, it would be a dull world if every building was designed exclusively to conserve energy. The Royal Institution of British Architects is showing a welcome enthusiasm about energy conservation in new design.

One of the greatest sources of heat loss from buildings is due to leaks. It is virtually impossible to produce a building in which cracks are not present or will not develop due to expansion and contraction of the structure due to changes in temperature. Simple draught-stripping by many of the flexible materials available is easy and cost-effective. More serious problems arise in hangars and workshops where we are applying flexible curtains to doorways and brush strips which close up the large gaps between doors.

In many buildings external sealing of the cladding may be a relatively expensive business and we have no rapid method of measuring the results. A project has been mounted by the Building Research Establishment to see if we can devise a method of measuring air changes in buildings which can be easily used, does not require sophisticated equipment and will give rapid results. Since the results depend on the variation of wind speeds and direction, high levels of accuracy cannot be expected. Confidence in the cost-effectiveness of remedies should, however, be possible for a large number of buildings.

Savings in fuel consumption

Most of the savings achieved have been obtained with the active co-operation and in many cases even encouragement from building occupants, and it is to be hoped that these relationships will continue.

The following assessment of savings in the Civil Estate was reported by the Minister on 14th March 1978:

(1) Cost (£ million) of energy consumed by PSA in Civil Estate buildings in the past five years at constant prices, including electricity, solid and liquid fuel consumed by prisons:

1972/73	1973/74	1974/75	1975/76	1976/77
46·4	38·2	36·5	34·6	35·5

(2) Percentage savings in gas oil based on analysis of actual consumption of a random sample of 60 buildings in the Civil Estate, compared with 1972/73 and taken without knowledge of the occupants or engineering staff:

1973/74	1974/75	1975/76	1976/77
11%	19%	25%	30%

(3) It is estimated that there has been an increase in the size of the Civil Estate of 17 per cent between 1972/73 and 1975/76. It will be interesting to see whether the reported total costs for 1976/77, compared with 1975/76, indicate that the savings have now peaked. It should be noted, however, the quoted annual costs have been calculated by the use of inflation indices of which the accuracy is uncertain.

Planning for Centralized Dictation

J. E. P. SAMPSON, Inland Revenue

Teddy Sampson is an Inspector of Taxes serving in the Management Services Division, Inland Revenue, and specializing in audio systems. —*Editor.*

Introduction

The latest previous article on centralized dictation was written by Mr. J. H. Spencer, also of Inland Revenue, for the August 1971 edition of this journal.* It described the setting up of a Centralized Dictation System (CDS) in the Schedule E Centre at East Kilbride. Since then Inland Revenue has successfully established a similar large system in the Public Departments Centre at Llanishen, Cardiff, a medium-sized system in the Capital Taxes Office, Shepherd's Bush, London, and a number of small, separately wired systems serving 82 local Valuation Offices and one Collection Office.

It is thought that the experience gained in the setting up and operation of this wide variety of systems may be of value to other departments, and this article attempts to set out in simple terms a logical approach and procedure.

Advantages of CDS

Evenness of workload. In the absence of a CDS, the usual practice is for authors to dictate sufficient material to fill one or more reels, cassettes or sound-sheets on their individual machines and to send those with the associated papers to the typist, who then transcribes the dictated material and returns her work with the papers to the originator. Urgent items may be sent for transcription without waiting for the recording medium to be filled, with instructions that their transcription be given priority. It will be seen, therefore, that, except in the case of priority work, there may be considerable delay between dictation and transcription, and a marked unevenness of tempo on the part of the typists, who may well suffer periods of relative inactivity followed by periods of high pressure. CDS, by enabling material to be dictated direct to a recording bank in the typing centre, ensures a much steadier input to typists throughout the working day, leading to a higher level of output and enhanced efficiency. Urgent material may still be given priority by means of a telephone call to the typing centre supervisor.

* 'Centralized dictating—Is it all it's cracked up to be?' by J. H. Spencer, *O & M Bulletin*, Volume 26, Number 3, August 1971.

Fewer machines. A CDS operating through a telephone exchange makes use of the telephone instruments as the means of input into the central recording bank, so the users do not have their desks cluttered up with dictating machines and do not have to spend time inserting and removing recording media. With a separately wired system individual handsets are provided, but these take up much less space than desk-top dictation machines and, again, there is no inserting or removing recording media.

Fewer interruptions. Since users of CDS operating through a telephone exchange dictate into their own telephone instruments, there can be no possibility of their dictation and train of thought being interrupted by incoming calls.

Limitations of CDS

Restricted access. CDS is designed to provide a level of access of 95 per cent, i.e. 19 calls out of 20 into the system should be successful first time. However, that level of access depends upon calls being kept reasonably brief. Our experience is that material occupying more than 1½ Treasury Typing Units, i.e. nine minutes' recording time or 4½ minutes' playback time, or involving complicated computations should *not* be dictated into a CDS. Moreover, a high level of competence in dictation is required, with pauses, repetitions and amendments being reduced to a minimum. Authors must recognize that by 'holding' a recorder for excessive periods, they are denying it to others and so causing frustration and inefficiency.

Separation from associated papers. This means, first, that authors must dictate full and unambiguous instructions and, secondly, new procedures may have to be devised for typed material to be married with the associated papers before being presented for signature.

Flexitime. If the office is on flexitime, difficulties may arise as a result of typists working hours which, apart from core times, no longer coincide with those of the authors. In such circumstances, special arrangements may have to be made to ensure that full cassettes are replaced by empty ones at regular intervals while the typing centre is unstaffed so as to avoid the system coming to a halt.

Rigidity (separately wired systems only). Once a separately wired system has been installed, any change in users' positions will involve re-wiring which is both expensive and time consuming, and may well lead to the system being no longer cost-effective.

Individual machines

Whatever the system, there will always be a requirement for individual machines, for:

(*a*) The dictation of long items or those with complicated computations.
(*b*) Officers served by personal secretaries.
(*c*) Officers working away from the building.

(*d*) Reasons of confidentiality and security.
(*e*) Back-up in case of a system failure.

When planning a CDS it is important to assess the proper requirement for such machines and to ensure their compatibility with the transcribers in use in the typing centre.

Balance of pros and cons for CDS

Provided the bulk of dictated material is suitable, any CDS, whether linked to an exchange or separately wired, should prove cost-effective and should provide a more rapid turn round between typing centre and author. The cost to the author is that, no longer having a choice of typist, he or she is required to maintain a high and consistent standard of dictation. In the Inland Revenue this has led to the production of a comprehensive and authoritative manual on audio dictation for use throughout the department. Separately wired systems have proved generally satisfactory for local offices with about 20 authors where no PABX is in use. The main drawback of such systems is that any alteration of the wiring is costly and cannot be carried out at short notice. Systems of comparable size are available for operation through a manual exchange, and the writer was favourably impressed with one which he saw (not in a government department) earlier this year.

Preliminary investigation

Fundamental feasibility. The investigation and planning that are essential if a satisfactory CDS is to be set up involve a considerable expenditure of time and energy. Much unnecessary effort may be avoided if it can be established right at the start that CDS is not feasible for a given set of circumstances. First, then, the following questions should be answered:

(*a*) Are there fewer than 20 authors or potential authors?
(*b*) Are there more than 25 authors or potential authors?
(*c*) Is the office served by a manual exchange?
(*d*) Are there fewer than two positions unoccupied on the manual exchange?
(*e*) Is undisturbed occupancy of the premises guaranteed for less than three years?
(*f*) Is the office served by a PABX?
(*g*) Are there fewer than two positions unoccupied on the PABX?

CDS is not feasible if the answer is 'Yes' to question (*a*) or to any of the following combinations of questions:

(*b*), (*c*) and (*e*); (*c*), (*d*) and (*e*); (*e*) (*f*) and (*g*).

CDS feasible. If the answers to the questions posed in the previous paragraph show that CDS is feasible, the next step is to decide which type of system might best be adopted. The choice will depend upon the answers to those key questions as follows:

'Yes' to (*c*) and (*d*), and 'No' to (*b*) and (*e*)—Separately wired system
'Yes' to (*f*) and (*g*), and 'No' to (*b*) and (*e*)—Separately wired system
'Yes' to (*c*), and 'No' to (*b*) and (*d*) —CDS through manual exchange
'Yes' to (*f*), and 'No' to (*g*) —CDS through PABX.

Post Office clearance. Once it has been established that CDS through a manual exchange or PABX is feasible, the next step is to seek the advice of the Post Office (through Departmental Telecommunications section if appropriate) in order to confirm the suitability of the exchange equipment and to ascertain the maximum number of CDS recorders that could be accommodated. The Post Office may themselves wish to carry out certain engineering work prior to the installation of the system. Should they do so, they should be asked to give an estimate of the time and cost involved, and they should be advised that they will be informed as soon as it has been decided to install a CDS.

Management and staff side agreement

Once feasibility has been established and, where appropriate, Post Office clearance has been obtained, the next and vital step is to obtain the agreement of management and staff side to the system in principle and to the carrying out of the detailed study which will decide both the size of the system and the requirement for individual machines. Resistance may be met, particularly from older officers and typists, and any misgivings must be dealt with tactfully, sympathetically and with no evasion. Failure to obtain general and enthusiastic agreement at this stage may jeopardize the whole project.

Work measurement

Having obtained the necessary agreement, the way is now clear to assessing the detailed requirements of the system. Exceptionally, the planning for CDS may be part of the planning for a new office from scratch, in which case the requirements will have to be based on those of a comparable establishment already in operation. In general, however, the proposed CDS is likely to be for an office already a going concern, and in our experience the most satisfactory way of assessing the requirements both of the system and for individual machines is to arrange for the typists to make an additional carbon copy of every item typed and to identify each item with the originator's and typist's initials. The copies are then assembled at the end of each day and passed daily or weekly to the CDS planner throughout the period of the measurement, which should be of sufficiently long duration to cover full normal working weeks and at least a selection of the 'peaks' and 'troughs' that occur during the year.

In our experience it is also necessary to identify those items transcribed within the period under review which were dictated before the period began, and to obtain carbon copies of items dictated during

the period but not transcribed until after it had ended, in order to assemble a complete record of all material actually dictated within the selected period.

The next step is to convert the items into Treasury Typing Units by means of a transparent template known as a typing unit measure, and obtainable from the Civil Service Department, Management Services (General) Division, Old Admiralty Building, Whitehall SW1A 2AZ. The format of the template, which is A4-size, is reproduced as *Appendix A*. Using the template, the work may be divided into two main categories:

Over 1½ *TTU in length*	Not suitable for CDS
Up to 1½ *TTU in length*	Probably suitable for CDS.

Any item of up to 1½ TTU in length which contains more than one simple computation should be considered as not suitable for CDS.

Author's output. Since the author of each item has been identified on the carbon copy it is possible to group the authors as follows:

(*a*) Those whose work is wholly or mainly unsuitable for CDS.
(*b*) Those whose work is wholly or mainly suitable for CDS.

Typists' output. Generally it can be assumed that audio typists' daily output working, without having to keep changing to complicated copy work, under the conditions of a centralized unit will be within the range of 22–35 TTUs a day. It is advisable at this stage, using the carbon copies, to compare the daily output of each audio typist with this expectation and, if it falls markedly short of that standard, to investigate with the Superintendent the reasons for that shortfall. It may well be that a major reason is simply poor dictation procedure, making transcription difficult. Whatever the reasons, it is important to remove them as far as is possible before the CDS is installed.

Assessing the size of the CDS

The planner is now in a position to assess the size of the system to be installed. The capacity of a bank of central recorders to accept dictation at an access level of 95 per cent has been calculated by the Civil Service Department as follows:

Number of recorders	*Lines per diem*
2	1,000
3	3,000
4	5,000
5	7,000
6	9,000
7	11,000
8	13,000
9	15,000
10	17,000

It should be noted that the maximum number of recorders that can be accommodated on one 'level' of a PABX is ten. If more than 10 recorders are required, maximum capacity will be obtained by dividing them into large groups each containing the same or approximately the same number of recorders. For example, if 15 recorders are required, they may be grouped as follows:

Grouping	*Lines per diem*
3+3+3+3+3	15,000
5+5+5	21,000
5+10	24,000
7+8	24,000

Clearly, the groupings 5+10 and 7+8 provide the greatest capacity.

Peak loading. The CDS should have sufficient capacity to provide an access level of 95 per cent during a period of peak loading, as disclosed by the carbon copies, bearing in mind that items considered unsuitable for CDS should be ignored.

Complement of audio typists. If, from a consideration of the carbons and any consequential discussion with the Superintendent it is clear that the audio typing staff should be able to keep abreast of the output from the recording banks, no problem arises. If, however, it appears that, despite all efforts, an unacceptable typing backlog could arise, two courses will be open to the planner, who may either initiate an increase in audio typist complement or, if that is not practicable, he may deliberately restrict access of selected authors to the CDS. The first and preferable course incurs staffing cost, while the second, while leading to a reduction in the capital cost of the CDS, incurs additional expenditure on individual dictation machinery. It is, of course, important to take into account the output from both the CDS and the individual machines when assessing the planned workload on the audio typists, and to that end the following formula may be of value:

6 minutes of dictation time = 3 minutes' recording
= 15 minutes' typing
= 1 TTU
= 25 lines of type.

Training

Audio dictation involves two distinct elements:

(*a*) Procedures applicable to audio dictation generally; and
(*b*) Techniques applicable to particular machines or systems.

The introduction of CDS will bring with it new techniques which may best be explained and put across by the manufacturer or United Kingdom distributor, and it is very desirable that provision for training authors and typing staff be included in 'the supply of the CDS'. Meanwhile, the transition to CDS when it comes will be greatly assisted if steps have been taken beforehand to impress upon all authors the value

of exercising correct procedures for audio dictation. The manual on audio dictation provided for all authors and typing staff in the Inland Revenue deals with dictation into individual machines and into CDS, and gives examples of correspondence originating in a Tax District, a Valuation Office, a Collection, and Head Office.

Maintenance and servicing

The fact that CDS involves the sharing of facilities by a number of users means not only a high degree of serviceability is required of the equipment, but also that, should a fault occur, it must be rectified with the minimum delay. The tenderer's known record of reliability in supply and servicing of audio equipment may well be the deciding factor in the acceptance or rejection of his tender.

Bank attendance

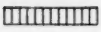
For systems using more than, say, four recorders, it may prove desirable, except in the case of continuous loop CDS, to provide for a Clerical Assistant as bank attendant for each bank of recorders. Such provision must be included in the costing, and the training of attendants must be included in the contract. If flexible working hours are in force, the presence of a bank attendant might solve the problem of how to change over cassettes and thus keep the system in operation during the absence of the typing staff.

Conclusion

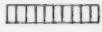
Given favourable circumstances a Centralized Dictation System should prove of considerable benefit, but not all dictable material is suitable for handling by CDS. It is hoped that this article will help officers concerned with the provision and control of audio equipment, first to assess the feasibility of a CDS and then to proceed in such a fashion that the most appropriate system is selected and installed by the desired date.

TYPING UNIT MEASURE

Elite

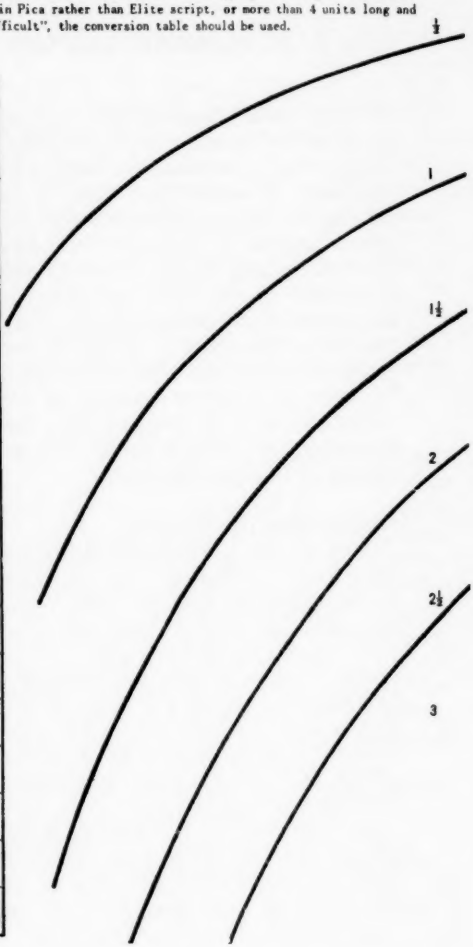


Pica



TO USE: Place the top left-hand corner of this measure over the top left-hand corner of the main block of typing, ignoring addresses, salutations, subscriptions etc. The unit value will be found on the line below the bottom right-hand corner of the main block of typing. If the job measured is other than single-spaced, or typed in Pica rather than Elite script, or more than 4 units long and "straightforward" rather than "difficult", the conversion table should be used.

Measured Units		Elite			Pica		
		1	1½	2	1	1½	2
½		½	½	½	½	½	½
1		1	1	½	1	½	½
1½		1½	1½	1	1½	1	1
2		2	1½	1½	1½	1½	1
2½		2½	2	1½	2	1½	1½
3		3	2½	2	2½	2	1½
3½		3½	3	2½	3	2½	2
4		4	3½	2½	3½	3	2
4½	D	4½	4	3	4	3	2½
	S	4	3½	2½	3½	3	2
5	D	5	4	3½	4	3½	2½
	S	4	3½	2½	3½	3	2
5½	D	5½	4½	3½	4½	4	3
	S	4½	3½	3	3½	3	2½
6	D	6	5	4	5	4	3½
	S	5	4	3	4	3½	2½
6½	D	6½	5½	4½	5½	4½	3½
	S	5	4½	3½	4½	3½	3
7	D	7	6	4½	6	5	4
	S	5½	4½	3½	4½	4	3
7½	D	7½	6½	5	6½	5	4
	S	6	5	4	5	4	3½
8	D	8	6½	5½	6½	5½	4½
	S	6½	5½	4½	5½	4½	3½
8½	D	8½	7	5½	7	6	4½
	S	7	5½	4½	5½	4½	4
9	D	9	7½	6	7½	6½	5
	S	7	6	5	6	5	4
9½	D	9½	8	6½	8	6½	5½
	S	7½	6½	5	6½	5½	4
10	D	10	8½	6½	8½	7	5½
	S	8	6½	5½	6½	5½	4½



Management Bookshelf

Typing and Secretarial Services

Mrs. B. M. HOWARD, Civil Service Department

'Twenty million young ladies rose to their feet saying "We will not be dictated to" and promptly became stenographers.' This was G. K. Chesterton's comment on women's suffrage. Nevertheless, despite his cynicism, the secretarial team is today universally acknowledged as having an indispensable part to play in commerce, industry and government. Indeed, it has been calculated that in the conduct of public business, typing and secretarial services occupy some 29,000 staff at a total staff cost of well over £100 million a year. It is, therefore, of fundamental importance that this work should be efficiently organized, that its mechanization should be facilitated and that the mutual responsibilities of both client and typing service should be recognized.

There are a great number of books on various aspects of typing/secretarial services, ranging from the management function to careers guidance for school leavers. This article merely suggests a few titles chosen to illustrate the range.

Organizing the facility

Typing services (a CSD Management Services handbook) summarizes experience in examining the organizational problems likely to be faced by Management Services staff, Controllers of Office Services and by Superintendents of typing pools. The topics covered include measurement, quality standards and guidance on the conduct of reviews of typing services. Copies are available to government departments from HMSO, Section LS 4, citing 'Form E125'; outside organizations can obtain the publication from Civil Service Department (Management Services), Room 2/99, Old Admiralty Building, Whitehall, London SW1A 2AZ, by enclosing a cheque or postal order for £0·45. The handbook was published in 1975 and contains 43 pages.

A study by the Institute of Administrative Management on *The effective use of secretarial services* made the frightening assertion that 'the vast majority of secretarial staff spend some 30 to 40 per cent of their working lives not being gainfully employed'. They therefore briefly examined the means whereby an organization could make more effective use of an expensive commodity. One solution to the problem which may commend itself in certain circumstances is the establish-

Editor's note. The CSD Management Services handbook *Typing services* is temporarily out of print.

ment of *Centralized dictation systems*: a facility examined by CSD in another Management Services handbook (E132, available to government depments from HMSO, LS 4, and to outside organizations for £0·45 from CSD Management Services), and also by Mr. J. E. P. Sampson in his article 'Planning for Centralized Dictation' in this edition of *MSIG*. The handbook should be read in conjunction with *Typing services* to which it is a companion volume, with parts in one which are relevant to the other.

The effective secretary must be more than just a pretty face, but it is sometimes not easy for the manager to identify those other traits necessary for the job. The booklet *But will she be a good secretary?* by Susan Lewis-Smith (Management and Training Adviser with the Industrial Society) attempts to make the business of recruiting a secretary much more professional than the hit-and-miss affair this can be. Guidance is given on the establishment of accurate job descriptions, the conduct of the interview and on the testing of applicants for different types of jobs (1974; Harrap; £0·75; 71 pages). Advanced techniques for the *Recruitment and selection of typists and secretaries* are discussed by Eva Roman and Derek Gould (Business Books; 1974; £6·50; 211 pages), who demonstrate first the theory and then the practice of current selection methods.

The secretary's role

The relative scarcity of secretarial staff and their increasing costliness has focused attention on the role of the secretary—which extends beyond the basics of shorthand and typing to social and diplomatic skills, organizational ability and even to the creation of a co-ordinated and productive office environment. In order to achieve this, a partnership must be developed between executive and secretary, with each contributing to the team. Various books might be suggested to help and enlighten those sitting at either side of the office desk. The executive might care to examine his responsibilities as delineated in *You and your secretary* (Industrial Society; 1970; 32 pages). *The secretary, her boss and her job* (Business Books; 1975; £4·50; 196 pages) by Eva Roman, although directed primarily at the secretary, can usefully demonstrate the frustrations, and the potential, of life behind the typewriter.

The need to analyse functions, provide the right climate for the work, train both secretary and boss, and carefully select the equipment—these aspects of *Secretarial management* are stressed by Josephine Shaw in her 'Guide to the Effective Use of Staff' (Macdonald and Evans; 1977; £2·75; 240 pages). She declares: 'It is not pandering to women's lib to involve secretaries in creating and meeting objectives: it is simply economic business sense to develop the individual's potential so that each one can make his or her optimum contribution to the successful running of the organization.'

Training

It is not my intention to attempt to recommend texts for the training of

typists in their basic skills; it may, however, be useful to note two books dealing with techniques beyond the mechanistic level. Sheila Stanwell and Josephine Shaw have produced a guide to *Essential secretarial studies* (Edward Arnold; 1974; £4·25; 694 pages). This might usefully be supplemented by John Harrison's *Secretarial duties* (Pitman; 5th edition, 1975; £2·50; 322 pages), which emphasizes the modifications to basic skills made necessary by the increasing sophistication of office equipment and communication devices. For the secretary anxious to develop her career potential, three notebooks from the Industrial Society can be suggested: *The secretary's role* (1974; £0·75; 23 pages), *The senior secretary in management* (1971; £0·50; 25 pages) and *Personal assistants and senior secretaries* (1971; £0·45; 26 pages).

How necessary are typing services?

The emphasis in many of the books reviewed here is on the cost of typing/secretarial services as a proportion of an organization's administrative budget. The question might well be asked: How necessary is this expense? An analysis by Harry Cemach of Anbar Publications Limited might surprise those accustomed to the sometimes lengthy courtesies of formal correspondence and to the insistence on having all minutes and letters typed. He argues for the cutting out of verbiage, for getting down to the essential facts to be transmitted, for the use of form letters, reply memos and complement slips to save keyboarding, and even suggests that in certain circumstances there is nothing wrong with a hand-written note. (Although, perhaps, attention might first be drawn to page 89, headed 'Is your writing all right?', in the May 1978 issue of this journal.) Bidding *A farewell to typists* (Anbar; 1974; £1·90; 85 pages), Mr. Cemach is not striking a death knell, but pleading for the most efficient, and thoughtful, use of a highly expensive commodity, too often taken for granted.

Some recently published titles

Designing instructional text by James Hartley. Published by Kogan Page Limited; 128 pages, A4 format; price £8·00.

Industrial democracy: International views. Published by the Social Science Research Council for the SSRC Industrial Relations Research Unit, Warwick University; 306 pages, A4 format; price £2·00.

The management of industrial relations by K. Hawkins. Published by Penguin Books Limited; 264 pages; price £1·25.

New CSD Publications

Beginning with this issue, MANAGEMENT SERVICES IN GOVERNMENT will publish a quarterly list of documents recently issued by the Civil Service Department and its associated bodies. This will include material from the Central Computer Agency, the Civil Service College, the Civil Service Commission, as well as from CSD itself.

These items may be examined in the Central Management Library, Civil Service Department, Old Admiralty Building, Whitehall, London SW1A 2AZ.

Unless otherwise stated, requests for copies should be sent to the Central Management Library, CSD, at the above address. HMSO publications may be ordered from PO Box 569, London SE1 9NH; from Government Bookshops, or through any bookseller.

Changes in Government Computer Procurement Procedures
Press statement; 2 pages; available from Information Division, Civil Service Department, Whitehall, London SW1A 2AZ.

Civil Service Statistics 1978
67 pages; published annually; available from HMSO; price £2·75.

Evaluation Study of Job Appraisal Reviews in the Department of the Environment (Central)
60 pages.

Introduction to Selection Interviewing. By Dr. E. Anstey
39 pages; available from HMSO; price £1·50.

Is My Office Safe? A handbook for supervisors
Sponsored by CSD and the Training Services Division of the Manpower Services Commission; 22 pages; available from HMSO; price £0·50.

Programme Analysis and Review: A reading list
29 references.

Published by CSD 1968–1977: a subject guide to the literature issued by the Civil Service Department
25 pages; published annually.

Self-instruction: Its contribution to management. Proceedings of the Civil Service College senior seminar, Sunningdale, March 1978
27 pages.

Towards Retirement
55 pages; 3rd edition; available from Welfare Adviser, Civil Service Department, Whitehall, London SW1A 2AZ; copies for official use available from HMSO, section LS4.

Central Computer Agency

Longer-term Review of Administrative Computing in Central Government. Report by the Steering Committee. Chairman: Mr. R. W. L. Wilding
53 pages; available from Central Computer Agency, Branch C2, Room 907, Riverwalk House, Millbank, London SW1P 4RT.

Civil Service Commission

Both items are available from Civil Service Commission, Alencon Link, Basingstoke RG21 1JB.

Annual Report 1977
39 pages.

The Young Executive in the Civil Service
Recruitment publicity; 24 pages.

Civil Service College

All items are available from The Secretariat, Civil Service College, Sunningdale Park, Ascot SL5 0QE.

Civil Service College Information Leaflet: September 1978–August 1979
4 pages.

Main Series of Courses and Seminars: Programme September 1978–August 1979
150 pages; published annually.

Systems Training Courses: Programme September 1978–August 1979
48 pages; published annually.

Report of the Working Party on Industrial Relations Training 1976/77
20 pages.

Seventh Annual Report by the Principal to the Civil Service College Advisory Council: September 1976–August 1977
51 pages; published annually.

Computer Installations for Government Departments

A list of all Government computers as at 1st January 1978 was published as a supplement to the May 1978 edition. Details of computers ordered during the period 1st January to 31st March 1978 are shown in the following table.

DATE OF ORDER	DEPARTMENT[1]	LOCATION	MAIN USES	MANUFACTURER[2] AND TYPE OF COMPUTER
1B Computers on order for administrative and general purposes				
January 1978	MOD (Army)	Worthy Down	Army pay and records	IBM 370/158 Model I upgraded to Model D
January 1978	MOD (Army)	Worthy Down	Army pay and records	IBM 3031
January 1978	Environment	Croydon	Building design	Tektronix 4014-1
February 1978	Environment	Hastings	Front end processor	ICL 7903
February 1978	Environment	Garston	Front end processor	GEC 40/80
February 1978	MOD (Army)	Worthy Down	Army pay statements	NCR COM System
March 1978	MOD (PE)	Bureau West	Bureau work	ICL 2980
2B Computers on order for scientific and technical purposes				
January 1978	MOD (PE)	Farnborough	Simulation	R & H AD10[3]
January 1978	Environment	Watford	Graphics	Prime 300
January 1978	Environment	Watford	Status	Prime 300
February 1978	Environment	Wallingford	General scientific computing	DEC PDP 11/34

[1, 2] Refer to supplement to May edition for Department and Manufacturer keys.

[3] R & H—Van Rieteshoten and Houwens Ltd.

Selections of articles

Readers may like to know that selections of articles which have appeared in *MSIG* are available from the Editor. Each selection covers a specific subject-area, for example:

Reducing Expenditure on Postal and Telecommunications Services; two articles; 24 pages; price 86p, including postage.

'Reducing Expenditure on Postal and Telecommunications Services' by A. Phillips.

'Controlling the Telephone Costs of a Large National Insurance Company' by P. W. D. Smith.

Operational Research in Government; four articles; 48 pages; price £1·74, including postage.

'The Use of Operational Research and Systems Analysis in Government Decision-making' by Sir Peter Baldwin, KCB.

'A System of Models for Planning Highways Expenditure' by Dr. K. Aldred and B. L. Glicksman.

'Operational Research in the Planning of Employment Services in Large Cities' by N. F. McGlynn, MBE, M. F. Shutler and P. D. Saalmans.

'Peterhead Bay Harbour—An OR Study into Its Capacity for Tanker Traffic' by W. Russell.

Planning Programming Budgeting Systems; four articles; 52 pages; price £1·91, including postage.

'Planning Programming Budgeting Systems' by J. M. Bridgeman.

'Planning Programming Budgeting Systems II' by J. M. Bridgeman.

'Planning Programming Budgeting in the Police Service in England and Wales' by G. J. Wasserman.

'Planning Programming Budgeting in DES' by J. G. Bagley.

Flexible Working Hours; three articles; 24 pages; price 79p, including postage.

'Flexible Hours Experiments' by G. Galey.

'Flexible Working Hours in DHSS Local Offices' by E. S. Drye.

'Flexible Working Hours—A Policy for the Civil Service' by R. L. Joseph.

Job Satisfaction; four articles; 32 pages; price £1·15, including postage.

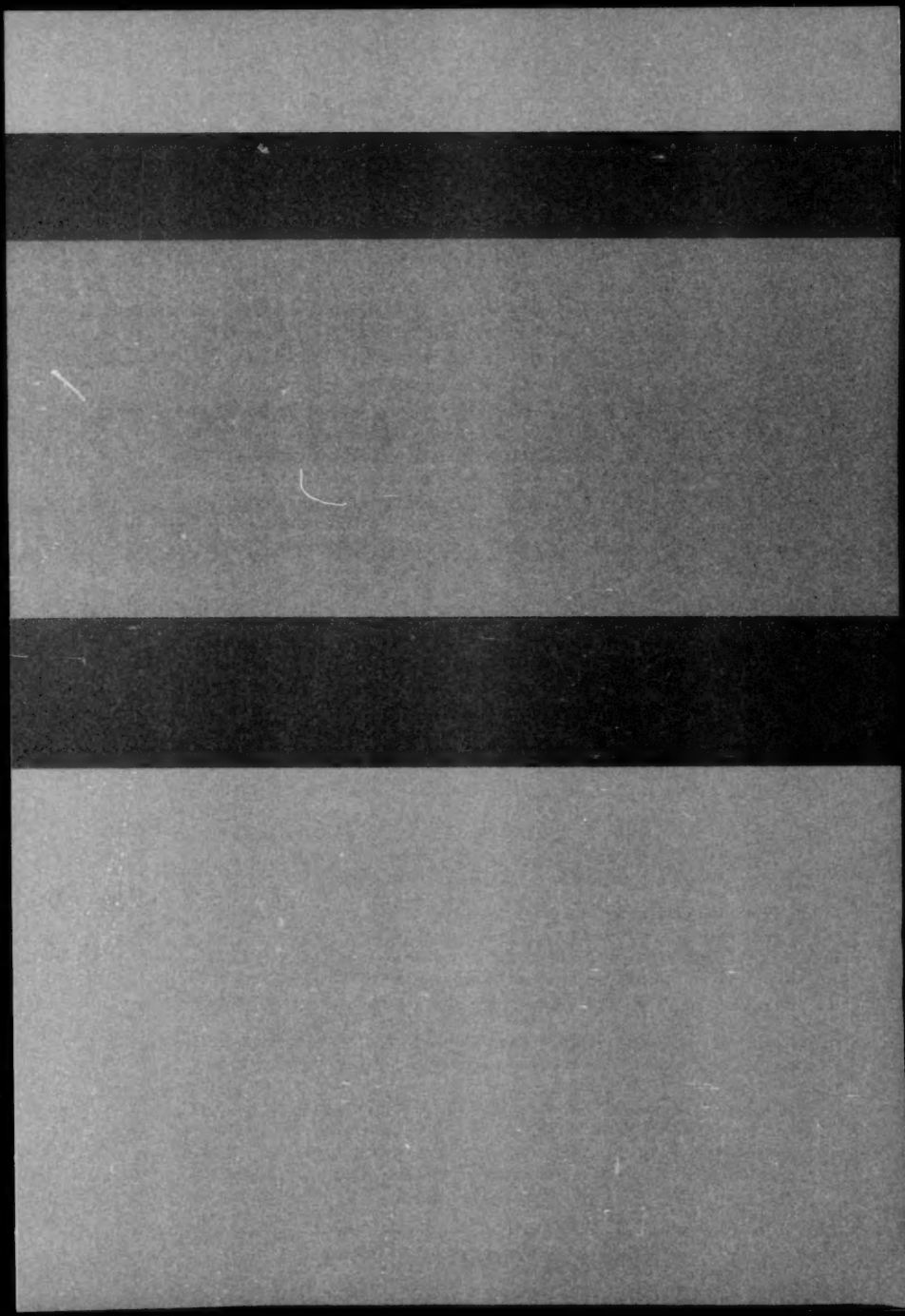
'Job Satisfaction in the Civil Service—A Perspective' by K. B. Robertson.

'A Job Satisfaction Approach to a Management Problem' by D. E. Pace.

'"New Model Office" Project in DHSS' by D. Burden.

'Bridging the Information Gap' by J. Hunter and D. B. Crampton.

Other selections include: *Financial Checking and Internal Audit* (two articles; 16 pages; price 51p); and *Performance Measurement* (two articles; 16 pages; price 51p).

Requests for copies should be addressed to The Editor, Management Services in Government, Civil Service Department, Whitehall, London SW1A 2AZ. Persons and organizations outside the Civil Service should enclose with their order a cheque or postal order for the appropriate amount, made payable to 'Civil Service Department'.

Printed in England for Her Majesty's Stationery Office
by The Campfield Press, St. Albans